DOCUMENT RESUME

ED 101 203 CE 002 991

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|---|---|
| AUTHOR | Nadolsky, Julian M. |
| TITLE | Vocational Evaluation of the Culturally Disadvantaged; A Comparative Investigation of the JEVS [Jewish Employment and Vocational Service] System and a Model-Based System. Final Report. |
| INSTITUTION | Auburn Univ., Ala. Dept. of Vocational and Adult Education. |
| SPONS AGENCY | Social and Rehabilitation Service (DHEW), Washington, D.C. |
| PUB DATE | Aug 73 |
| NOTE | 119p. |
| EDRS PRICE | MF-$0.76 HC-$5.70 PLUS POSTAGE |
| DESCRIPTORS | *Comparative Analysis; *Culturally Disadvantaged; Employment Potential; *Employment Programs; Models; *Program Effectiveness; Systems Approach; *Vocational Rehabilitation |
| IDENTIFIERS | *JEVS System; Jewish Employment and Vocational Service System |

ABSTRACT

The purpose of this study was to compare the overall effectiveness of a vocational education system designed specifically for a culturally disadvantaged population (in this case the Jewish Employment and Vocational Service (JEVS) System) with a model-based system incorporating the techniques and procedures normally employed by vocational evaluators in rehabilitation facilities. The data generated by the study consisted of the types of recommendations and disposition made for the 65 clients at followup intervals of 3 and 18 months after completion. The model-based system was more productive in developing vocational recommendations and a higher percentage of clients attained and maintained gainful employment over a more extended time interval. Use of the JEVS System produced more non-vocational recommendations, was more effective in enabling disadvantaged clients to attain immediate employment, and was significantly more capable of rendering consistency between vocational recommendations and vocational status over a short time. Eight conclusions are offered relating to the applicability and limitations of the two systems with respect to culturally disadvantaged clients. Three recommendations are made, based upon the results of the study. A bibliography, and the biographical, evaluation, and followup forms used in the study are appended. (Author/SA)

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# VOCATIONAL EVALUATION OF THE CULTURALLY DISADVANTAGED

## A COMPARATIVE INVESTIGATION OF THE JEVS SYSTEM AND A MODEL-BASED SYSTEM

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FINAL REPORT

AUGUST, 1973

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Research Grant No. 12-P-55140/4-01
Social and Rehabilitation Service
Department of Health, Education, and Welfare
Washington, D. C. 20201

## SIGNIFICANT FINDINGS FOR REHABILITATION WORKERS

The techniques and procedures traditionally used by rehabilitation-oriented vocational evaluators with a disabled population are applicable to the culturally disadvantaged when incorporated into the structure of a model-based vocational evaluation "system".

The JEVS System and the model-based "system" are both appropriate for use with the culturally disadvantaged since either system assists in reducing the rate of unemployment among the population.

The degree of applicability of the JEVS System and the model-based "system" is dependent upon the specific purpose and objectives of a particular vocational evaluation program. The JEVS System is more applicable to vocational evaluation programs that are designed to assist clients in obtaining immediate and direct employment, while the model-based "system" is more applicable to programs which focus upon the development of personal and vocational awareness in order to effect a more lasting degree of vocational success.

The JEVS System's procedural guidelines for work sample interpretation are inappropriate when strictly applied with certain disadvantaged individuals. These guidelines should be analyzed for possible downward revision.

When vocational evaluators are unable to develop vocational recommendations from the evaluative data, they are prone to relate this data to the establishment of recommendations of a non-vocational nature.

The degree of success achieved by a vocational evaluation program varies in accordance with the temporal criteria established for the measurement of success.

The nature of a vocational evaluation program offered to clients varies in accordance with the amount of structure imposed upon the vocational evaluator by that program.

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This investigation was supported, in part, by Research Grant No. 12-P-55140/4-01 from the Social and Rehabilitation Service, Department of Health, Education, and Welfare, Washington, D.C. 20201

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## PREFACE

Vocational evaluation is a diagnostic process and service that developed and evolved within a rehabilitation context in an attempt to determine the actual work behavior and vocational potential of the disabled. As a diagnostic process, vocational evaluation is designed to assess and predict work behavior and vocational potential by uncovering the specific skills and abilities of a client, by relating these findings to the world of work, and by outlining vocational objectives which are based upon the logical relationship between client assets and occupational requirements. As a diagnostic service, vocational evaluation is individually-oriented and focuses upon the use of practical, reality-based methods and procedures in order to assist the disabled in discovering their own work-related skills, abilities, behaviors, and potential. It is the practical, realistic nature of the vocational evaluation process and methodology that "sets it apart" from other programs of vocational assessment and establishes it as a unique entity.

By applying the results of vocational evaluation, many disabled citizens have achieved vocational success, economic independence, and personal fulfillment in life. They have been successfully rehabilitated or satisfactorily integrated into the mainstream of American society. These individuals are still disabled, but their disability does not impose an employment handicap upon them.

For several decades the vocational evaluation process was an integral part of the service structure of many rehabilitation facilities, although this process remained unnoticed by the great majority of "helping professionals" within our society. However, due to a combination of events and circumstances during the early to mid-1960's, our nation witnessed the widespread growth and acceptance of a "social service concept" which resulted in an array of social programs established by the federal government and designated as a full scale attack on poverty. The War on Poverty was a grandiose bureaucratic design which encompassed Head Start Programs for disadvantaged children, Job Corps and Job Corps Camp Programs for disadvantaged young adults, and VISTA Programs for disadvantaged families and communities. This design was destined for failure from the outset due to a lack of adequately trained personnel and an insufficient understanding of the target population. Furthermore, the responsiblity for administration of the War on Poverty programs was assigned to the newly established Office of Economic Opportunity (an Executive Office directly accountable to the President), rather than being incorporated into existing programs. This development further compounded the efficiency problems existent within the cumbersome bureaucratic structure, and soon a marked duplication of effort was evidenced.

Many of the War on Poverty programs have since been abandoned, while others have been incorporated into the service structure of various federal agencies. However, one of the redeeming consequences of the War on Poverty programs was that they created a deeper awareness of the problems and needs of the nation's poor or disadvantaged and of the types of programs

that might be applicable to the resolution of these problems. Vocational evaluation was one program or service considered applicable and essential to the rehabilitation or integration of the culturally disadvantaged into the social mainstream. Consequently, during the past few years, various agencies (both within and external to the vocational rehabilitation movement) began to develop and offer vocational evaluation services to the culturally disadvantaged.

The Manpower Administration of the U. S. Department of Labor even took the initiative to support the development of a vocational evaluation system designed specifically for use with a culturally disadvantaged population. This system, known as the JEVS Work Sample System, became available for distribution in 1968. The JEVS System was supported by research which indicated that it was considerably more effective than traditional types of counseling and placement services with a culturally disadvantaged population. For this reason, the JEVS System received widespread application among the various Manpower-affiliated programs. Since the JEVS System was recently made available to rehabilitation facilities, it is anticipated that this system will be applied by many rehabilitation-oriented vocational evaluators in the near future.

Although there is research data to support the efficacy of the JEVS System when compared with traditional counseling and placement services, there is a lack of research evidence to demonstrate that the JEVS System is superior to the methods and procedures that are normally employed by

vocational evaluators in rehabilitation facilities. The present investigation was designed to determine the real effectiveness of the JEVS System with a culturally disadvantaged population by comparing it against a model-based "system" which incorporated those techniques and procedures normally used by rehabilitation-oriented vocational evaluators.

The completion of a study such as this requires the cooperation, time, and effort of many individuals. Obviously, this study could not have been completed without the sincere cooperation of the 65 participants who contributed data to the project or without the interest of various individuals who made referrals to the project. Several faculty members and students in Rehabilitation Services Education at Auburn University contributed their time and effort to different phases of the project. A special note of gratitude is extended to the two vocational evaluators, Mr. T. J. Caldwell and Mr. Thomas W. Gannaway, and to the three graduate research assistants, Mr. John Burgess, Jr., Mr. J. Kent King, and Miss Tina Wheeler, for their dedicated, valuable, and continuous contributions to the project goals.

J. M. N.

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August, 1973

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VOCATIONAL EVALUATION OF THE CULTURALLY DISADVANTAGED: A COMPARATIVE INVESTIGATION OF THE JEVS SYSTEM AND A MODEL-BASED SYSTEM

## I. INTRODUCTION

The 1968 Amendments to the Vocational Rehabilitation Act provided the legal basis for the expansion of vocational rehabilitation services to a large, entirely new segment of society - the socially and culturally disadvantaged. These Amendments specifically stated that various diagnostic services, including vocational evaluation, may be provided to the socially and culturally disadvantaged in order to determine whether these individuals are feasible to receive vocational rehabilitation services. Consequently, vocational evaluation can legally be provided to any individual who is confronted with a social or cultural handicap, regardless of whether he has first been accepted as a vocational rehabilitation client.

### BACKGROUND INFORMATION

Since these Amendments were passed, many agencies outside of the vocational rehabilitation movement have developed vocational evaluation programs for the culturally disadvantaged. The majority of these programs are supported by the Manpower Administration of the United States Department of Labor. They are found within various Manpower-related agencies including: Concentrated Employment Programs (CEP), Job Corp, Neighborhood Youth Corps, and Work Incentive Now (WIN) agencies located in both urban and rural areas throughout the country.

In its support of vocational assessment programs for the culturally disadvantaged, the Manpower Administration has maintained an active interest in the use of practical, realistic vocational evaluation methodology. Their approach to vocational assessment has been essentially based upon the philosophy and rationale which underlies and guides the practice of vocational evaluation in rehabilitation facilities. However, these Manpower-affiliated programs have rejected the use of those specific techniques, procedures, and systems that were traditionally employed by rehabilitation-oriented vocational evaluators. Rather, the Manpower Administration sponsored a research and demonstration project (Jewish Employment and Vocational Service, 1968) designed to develop and validate a new work sample battery. This work sample battery was to be used by affiliated agencies in their evaluation of the work behavior and vocational potential of the culturally disadvantaged.

Under this project, the Jewish Employment and Vocational Service selected 28 of their existing work samples for inclusion in the research and demonstration study. These work samples were revised, organized into a mean meaningful format, and administered to 268 of the 474 culturally disadvantaged individuals referred to the project by the North Philadelphia Human Resources Development (HRD) Center of the Pennsylvania State Employment Service. The remaining 206 subjects were placed in the Control group and received only those services that were normally offered by the HRD Center (ie., counseling and placement). The Experimental and Control groups were matched on the variables of age, sex, and race, but differed significantly on handicap status and school grade completed. On these latter two variables, the Control group was <u>less</u> disadvantaged than the Experimental group.

The results of this study showed that the HRD counselors gained a more thorough understanding of those clients who were in the Experimental group. The counselors felt they were able to relate to and communicate with applicants in the Experimental group and that they could also develop more appropriate counseling plans or vocational objectives for this group. In addition, it was observed that the clients who received vocational evaluation services viewed work samples as being less threatening than psychological tests and responded in a positive manner to the work sampling procedures. In general, through the use of work samples, both the client and the counselor received information about the clients work behavior and vocational potential that was highly relevant and previously unavailable to them.

Based upon the results of this research and demonstration project, the JEVS work samples were considered to be highly valid in predicting the work behavior and vocational potential of those culturally disadvantaged individuals who normally received services through the United States Training and Employment Service. In essence, the predictions made by employment service counselors on the basis of the JEVS work sample results were more accurate than predictions based upon the use of normal employment service procedures (ie., counseling and placement). Due to the characteristics of the population served (ie., culturally disadvantaged) and the types of services against which the JEVS work sample predictions were compared, these results are not surprising.

It is questionable whether similar results would be obtained with a culturally disadvantaged population in a study which compared the JEVS

work samples with those work samples that are typically employed by vocational evaluators in rehabilitation facilities. If positive results were obtained in such a study, then it could be assumed that the JEVS System is the most valid and best procedure to use in the vocational evaluation of the culturally disadvantaged. To date, this remains undetermined since there is a lack of research evidence related to the efficacy of traditional rehabilitation-oriented vocational evaluation procedures with a culturally disadvantaged population.

In commenting upon some possible differences between a culturally disadvantaged population and those disability groups that are normally served in vocational evaluation programs within rehabilitation facilites, Nadolsky (1971) related that:

> Most of the vocational evaluation programs in rehabilitation were designed for individuals who were vocationally handicapped or disadvantaged as a result of physical, emotional, or mental impairment. On the other hand, the majority of individuals evaluated under the various manpower programs are vocationally handicapped or disadvantaged in the absence of physical, emotional or mental impairment. Such individuals are vocationally handicapped or disadvantaged as a consequence of a general inability to understand the meaning and nature of the social structure and a lack of those educational and social experiences which are pertinent and essential to full participation within society. Unlike the physically, emotionally, and mentally handicapped, most of the relevant life experiences of the socially and culturally disadvantaged have occurred outside the social mainstream. Consequently, it is questionable whether vocational evaluation programs designed for a disabled, but culturally consistent, population can be readily and successfully employed with a population

> of non-disabled individuals who are handicapped as a consequence of inadequate social integration. (p. 2).

As a result of differences in social integration, it remains undetermined whether the techniques and procedures employed by vocational evaluators in rehabilitation facilities are appropriate for use with a culturally disadvantaged population since they were essentially designed for a culturally consistent, but disabled, population. It is also uncertain whether the JEVS System contains a more appropriate set of techniques and procedures for the culturally disadvantaged than those methods currently in use with the disabled by vocational evaluators in rehabilitation facilities since related research has not yet been undertaken.

Until recently, the use of the JEVS Work Sample Battery was primarily confined to Manpower-affiliated programs since the Philadelphia Jewish Employment and Vocational Service was under contract with the Manpower Administration to provide training to CEP, Job Corps, WIN, and related personnel on the use of the JEVS System. Due to contractual obligations and restrictions very few rehabilitation oriented vocational evaluators were able to receive training on the use of this system. Since training was a prerequisite to purchase and use of this system, only a few rehabilitation facilities were able to apply the JEVS System within their vocational evaluation programs. At the present time, the JEVS System is extensively used to evaluate the work behavior and vocational potential of the culturally disadvantaged within Manpower sponsored programs, but it has not yet become an integral part of the vocational evaluation process in most rehabilitation

facilities. However, in a recent article by Kulman and Drachman (1973) it was indicated that "the JEVS system is now available for distribution to all interested agencies (p. 24)." Consequently, it is anticipated that, in the near future, the JEVS System will be incorporated into the vocational evaluation programs of many rehabilitation facilities. This system will undoubtedly be used by rehabilitation facilities in the vocational evaluation of both the disabled and the disadvantaged.

## STATEMENT OF THE PROBLEM

The general objectives of this project were to evaluate the assets and limitations of current vocational evaluation technology in relation to its suitability for use with a culturally disadvantaged population and to develop a structural model which would serve as a basis for evaluating the work behavior and vocational potential of the culturally disadvantaged. This information provided the basis and content for the Interim Report (Nadolsky, 1971) of this project. An additional general objective was to compare the effectiveness of a vocational evaluation program based upon the model developed with an existing vocational evaluation procedure (the JEVS System) designed specifically for the culturally disadvantaged. The comparative results of this study are presented and discussed in this Final Report.

From both a theoretical and a practical point of view, any vocational evaluation system, technique, or procedure that is designed for, and used with, a population that is considerably below the norm on a combination of physical, social, cultural, psychological, mental, or educational attributes

must be developed around a meaningful, reality-based format. They must be designed in a manner that confronts the client with his own assets and limitations as he responds to the task. By so doing, both the evaluator and the client can relate the actual behavior and performance observed to the requirements of various occupations.

For many years, vocational evaluators in rehabilitation facilities have employed a variety of practical, realistic techniques and procedures in their programs. They have relied heavily upon the following types of techniques and procedures: job tryouts, situational or workshop tasks, simulated or improvised tasks, and work samples. Although these techniques and procedures have been used with varying degrees of success in different rehabilitation facilities, there is currently a lack of research evidence to support the efficacy of one technique over the others. Furthermore, it remains to be determined whether those techniques and procedures that are traditionally used in vocational evaluation with a disabled population are relevant to the culturally disadvantaged.

The JEVS System was designed for the culturally disadvantaged and the research evidence underlying the system lends support to its applicability with this population. However, this research data was based upon a comparison with normal "counseling" procedures, rather than upon a comparison with other vocational evaluation procedures. Since normal "counseling" procedures are, by nature, verbally-oriented, the non-verbal culturally disadvantaged clients are not provided with the opportunity to "express" themselves on reality-based tasks which require active confrontation.

This study was conducted to determine the real effectiveness of the JEVS System with a culturally disadvantaged population in relation to other vocational evaluation techniques and procedures which are usually employed by rehabilitation-oriented vocational evaluators. Consequently, the specific objective of this investigation was to compare the follow-up performance of culturally disadvantaged clients evaluated under the JEVS System with a similar group of clients evaluated under the more eclectic, but structured, approach or system of vocational evaluation as applied within rehabilitation facilities. This latter approach or system of vocational evaluation was based upon the Model for Vocational Evaluation as presented and discussed within the project's Interim Report (Nadolsky, 1971). The results of this study should provide evidence to either support or negate the superiority of the JEVS System in vocational evaluation programs for the culturally disadvantaged.

## REVIEW OF RELEVANT LITERATURE

For several decades, rehabilitation facilities have relied upon vocational evaluation programs to assess the work behavior and vocational potential of the disabled. Although these programs are varied and diverse, they usually incorporate practical, realistic techniques and procedures into their structure. Moed (1960) and Neff (1966) indicated that in addition to psychometric tests, vocational evaluation programs in rehabilitation facilities differentially employed the following types of techniques in their work with the disabled: work samples, situational or workshop tasks, and job tryouts.. The value of simulated (Walker, 1968) or improvised (Barad, 1970) tasks was discussed as a voca-

tional evaluation technique that is applicable to a variety of rehabilitation facility clients.

Although various techniques and procedures have been differentially employed by rehabilitation-oriented vocational evaluators, the most highly structured and widely used system of vocational evaluation in rehabilitation has been the TOWER (Testing, Orientation, and Work Evaluation in Rehabilitation) System. This system was developed for use with a disabled population at the Institute for the Crippled and Disabled (ICD) in New York City. It was first published and made available for distribution in 1957. The TOWER System was revised in 1967 and the current version contains over 110 work samples which are arranged into the following fourteen broad occupational groups: Clerical, Drafting, Drawing, Electronics Assembly, Jewelry Manufacturing, Leathergoods, Lettering, Machine Shop, Mail Clerk, Optical Mechanics, Pantograph Engraving, Sewing Machine Operating, Welding, and Workshop Assembly (Institute for the Crippled and Disabled, 1967).

The TOWER System was developed primarily as a method of vocational evaluation for the vocational training areas at the Institute for the Crippled and Disabled or for certain occupations which were common to the New York metropolitan area. However, it has become the most widely used system of vocational evaluation in rehabilitation facilities. Due to its large scale application, the Institute for the Crippled and Disabled entered into a comprehensive study of the TOWER System designed to determine its predictive validity and to cross validate the system over a broad geographical area.

The results of this study (Rosenberg, 1967 a) indicated that TOWER System scores were generally not as accurate as training instructors ratings for predicting vocational success in related training areas. It was also noted that correlation coefficients between TOWER scores and vocational instructor ratings rarely exceeded .19. In summarizing the results of this investigation, Rosenberg (1967 b) concluded that as a result of the many functional difficulties in the full and proper application of the TOWER System throughout the country, "the true validity of TOWER remains unknown (p. 48)."

Although other vocational evaluation procedures have been developed for use with the disabled in rehabilitation facilities (Hallenbeck, 1960; Overs, 1964; Miller, 1968), they are not as well structured or widely used as the TOWER System. Furthermore, like the TOWER System, concrete evidence pertaining to their predictive validity with the disabled is unavailable. At the present time, there is a complete lack of data regarding the validity and applicability of any rehabilitation-oriented vocational evaluation system, technique, or procedure with a culturally disadvantaged population since related research has not been undertaken.

During recent years we have witnessed the development and distribution of other systems which are applicable to the vocational evaluation process since they employ practical, realistic methodology and incorporate an assessment component into their format. These systems include the Singer/Graflex Vocational Evaluation System, the Science Research Associates (SRA) Job Experience Kits, and Mind Incorporated's Tool Technology System.

In a discussion of vocational evaluation technology, Nadolsky (1973) related that:

> The Singer/Graflex Vocational Evaluation System is essentially a structured approach to occupational exploration. The tasks included within this system are designed to familiarize the individual with some of the duties and tools that are commonly encountered in various jobs within ten different occupational areas. Although the Singer/Graflex System employs a standardized audio-visual instructional format, most of the tasks encompassed within this system cannot be considered as work samples since they are presented in a step-by-step manner and do not allow sufficient latitude for individual judgment as the tasks are performed. In other words, these tasks do not require the individual to exercise independent judgment to the degree that is usually necessary to determine successful vocational performance. Furthermore, the ten areas included within the Singer/Graflex System were not developed around specific occupational or training criteria. Consequently, when using the Singer/Graflex System, many vocational evaluators may encounter difficulty in determining the actual level of skill possessed by the individual and in relating the systems results to meaningful occupational criteria (pp. 27-28).

This same article (Nadolsky, 1973) provided a brief review of the SRA Job Experience Kits. It indicated that:

> The SRA Job Experience Kits were developed to provide high school students with a more realistic understanding of the tasks involved in the performance of 20 different occupations. In addition to a Teacher's Manual, the Job Experience Kits contain 20 different job-oriented packets, each of which include an Instruction Manual and appropriate response sheets. The Instruction Manual presents information about the specific occupation under consideration and then projects the student into a few simulated situations which are appropriate to that occupation. The student is required to analyze the situation and record his reactions to structured questions on a response sheet. Certain packets also contain a simple tool that the student must use as he responds to the situation. The Job Experience Kits

> are essentially a practical and realistic approach to the provision of occupational information since experiential or exploratory procedures are incorporated into their format (p. 28).

Nadolsky (1973) also presented information on the Tool Technology System of Mind Incorporated and briefly discussed the basic difference between this system and the Singer/Graflex Vocational Evaluation System. Comments related to the Tool Technology System were as follows:

> Mind Incorporated's Tool Technology System is designed to provide basic training in the use of a variety of tools. This System is arranged in 15 carrels, each equipped with an audio-visual instructional format, the appropriate tools, and a "simulator" device that is used to perform the tasks encompassed within the carrel. In this respect, Mind Incorporated's System is similar to the Singer/Graflex Vocational Evaluation System. However, the Singer/Graflex System is organized around ten areas of work; while the Tool Technology System focuses upon fifteen types or categories of tools. The Tool Technology System is a practical and realistic approach designed to familiarize the individual with a variety of tools and with the manner in which they can be most effectively used (p. 28).

Although these three systems were not developed specifically for use with either a disabled or a disadvantaged population, they are all relevant to the vocational evaluation of the disabled and the disadvantaged. The TOWER System and these three recently developed systems are applicable to the vocational evaluation process and are currently used by vocational evaluators. However, no one system maintains regulatory control over the vocational evaluation process within rehabilitation facilities. Rather, the specific techniques and procedures encompassed within each system are employed on an individual basis according to the needs of the clients being

evaluated. It should be noted that no one system is supported by research evidence which would demonstrate its superiority over the others. At the present time, there is a lack of evidence regarding the efficacy of any of these four systems with either a disabled or a disadvantaged population.

The JEVS System was primarily designed to assess the work behavior and vocational potential of an inner-city disadvantaged population. Since it was specifically established to meet the assessment needs of this population, the JEVS work samples are primarily structured around tasks which are routine and repetitive in nature and related to various types of assembly, collating, sorting, or tending work. The JEVS System contains 28 work samples which are related to 20 different areas of work and included within 10 worker trait groups as defined by Volume II of the Dictionary of Occupational Titles.

Within each of the 10 Worker Trait Groups encompassed in the JEVS System, the work samples are ranked in order according to their level of difficulty. In addition, the 10 Worker Trait Groups are also arranged in a hierarchy in accordance with their level of complexity (ie., from the .887 - Handling Worker Trait Group through the .181; .281 - Drafting and Related Work Arrangement). Vocational evaluators are instructed to administer the work samples according to the order established by the JEVS Manual (1970). This means that the JEVS System is a highly structured approach to vocational evaluation since work sample administration should begin with the simplest tasks within the Handling Worker Trait Group and continue until all work samples are completed by the client in that group. This pro-

procedure is followed until the client completes all 28 work samples or until he is no longer able to satisfactorily perform the work sample tasks which are at a more complex level.

Due to a lack of equipment and materials, it may be impossible to begin all new clients on the first work sample within the Handling Worker Trait Group. In this instance, the JEVS Manual (1970) indicates that it is permissible to begin the client's work sample program at the next highest Worker Trait Group Arrangement (ie., the Sorting, Inspecting, Measuring, and Related Worker Trait Group). The work samples within the Handling group can then be administered in their proper sequence at a later time. According to the JEVS Manual (1970), this is the extent to which a vocational evaluator may alter the administration procedures on the JEVS System.

Since a client is not to be pressured into completing work samples that he does not wish to perform, it is permissible for the evaluator to omit these work samples from the client's program after conferring with the vocational evaluation supervisor. However, the evaluator should encourage all clients to complete as many work samples as possible. Consequently, it appears that the administration procedures for the JEVS System are highly structured and specified and make minimal provision for individual variation based upon the specific needs of the client. The work samples within the JEVS System are specified and governed in accordance with the procedural goals of the system, rather than being selected for administration on an individual basis. In this respect, the administration procedures incorporated into the JEVS System are similar to those encompassed within most psychometric test batteries. Since

the JEVS System was based upon criteria related to the combination of individual traits as defined under the Data, People, and Things arrangement in Volume II of the Dictionary of Occupational Titles, its scoring system and interpretative basis were designed to directly reflect the relationship between a clients measured performance and these underlying criteria.

As previously mentioned, the research evidence indicated that the JEVS System was highly valid in predicting the work behavior and vocational potential of culturally disadvantaged clients when compared with the normal type of "counseling" service provided by the United States Training and Employment Service. However, there is a lack of evidence to demonstrate whether the JEVS System is superior to other vocational evaluation systems, techniques, and procedures that are normally applied by vocational evaluators in rehabilitation facilities. This deficit provided the rationale and research basis for the present investigation.

## DESCRIPTION OF THE SETTING

Most of this research and demonstration project was carried out in two rooms on the first floor of Haley Center, a new ten story building located in the center of the Auburn University campus. The two rooms were about equal in size; one contained approximately 530 square feet of floor space, while the floor space in the other room was approximately 580 square feet. Each room was equipped with the necessary electrical fixtures and outlets, storage cabinets, and work surfaces.

The Philadelphia Jewish Employment and Vocational Service Work Sample Battery (JEVS System) was placed in the smaller room. The larger

room was equipped with a "system" of vocational evaluation developed specifically for the project. This latter "system" was based upon the Model for Vocational Evaluation as outlined and discussed in the project's Interim Report (Nadolsky, 1971).

In addition to these two rooms, other activities related to the vocational evaluation of clients were performed in smaller, but adjacent rooms. Small testing rooms or cubicles were used for initial interviewing and individual testing purposes. The administration of group psychometric tests was carried out in a room which contained approximately 225 square feet of floor space. The recruitment of potential clients and the performance of follow-up services were accomplished through contact with various local agencies including the Division of Vocational Rehabilitation, the U.S. Training and Employment Service, the Department of Public Welfare, and public school systems. These agencies were located within a 35 mile radius of the Auburn University campus. Upon referral, each potential client was contacted by a member of the project staff in order to explain the nature and purpose of the vocational evaluation program and to gather relevant biographical data. At that time arrangements were also made for the client to begin his vocational evaluation program on a specified date.

## II. METHODOLOGY

This study was the second phase of a research and demonstration project designed to develop a model for the vocational evaluation of the disadvantaged and to demonstrate the effectiveness of a vocational evaluation program based upon this model with a culturally disadvantaged population. The model developed during the first phase of this project was presented and discussed in the project's Interim Report entitled Development of a Model for Vocational Evaluation of the Disadvantaged (Nadolsky, 1971).

The second phase of this study was essentially a comparative investigation of the overall effectiveness of two vocational evaluation systems (ie., the JEVS System and the model-based "system") applied with a culturally disadvantaged population. The relative effectiveness of each system was determined by the degree of consistency between vocational evaluation recommendations and follow-up outcomes.

The program established to pilot test the comparative effectiveness of a model-based system of vocational evaluation for the culturally disadvantaged against an existing vocational evaluation system designed for this population entailed the identification and recruitment of disadvantaged clients; the acquisition of necessary systems, methods, techniques, equipment, and materials; the employment of qualified staff; and the development of operational procedures (including follow-up methods) for the project.

Disadvantaged clients (as defined in the 1968 Vocational Rehabilitation Amendments) were identified through discussions with personnel from the local offices of the Division of Vocational Rehabilitation, the U.S. Training and Employment Service, the Department of Public Welfare, and various public school systems located within a 35 mile radius of the Auburn University campus. These different agencies agreed to refer clients to the program and were provided with a supply of the Service Center's referral form entitled "Application for Special Services Center" (Appendix A). Upon referral, a personal contact was made with each potential client by one of the project's graduate assistants. The graduate assistants had been previously trained in recruitment procedures and in the responsibilities of their position. They also received an orientation to the objectives and operational procedures of the project and to the types of services that would be provided to participants.

In addition to a variety of psychological and psychometric tests, the following vocational evaluation systems and occupational exploration programs were purchased for use with clients: the JEVS System, the TOWER System, the Singer/Graflex System, and the SRA Job Experience Kits. The equipment and material necessary to apply these systems and programs was also purchased. An unforseen delay in acquiring the JEVS System caused a basic change in the method used for client assignment to the two vocational evaluation programs. Initially, it was anticipated that all clients referred to the project would be randomly assigned in equal numbers to each of the vocational evaluation programs established under the project. However, since the JEVS System was not obtained until the project was in operation for several months,

it was necessary to assign all of the clients who first entered the program to the model-based "system". The inability to maintain random procedures for the assignment of clients to either system was, therefore, a limitation of this study since it was impossible to control for the effects of selection on the outcome of the study. This limitation will be discussed in greater detail under the heading entitled "Description of the Population".

## PROJECT PROGRAM AND PROFESSIONAL STAFF

### Project Program

For the purpose of this investigation, two separate vocational evaluation programs were established and maintained within two rooms allocated to the project staff. These rooms were located in the Special Services Center on the first floor of Haley Center on the Auburn University Campus. One vocational evaluation program placed primary emphasis upon the use of the JEVS System; while the other program was based upon a Model for Vocational Evaluation developed during the initial stage of the project (Nadolsky, 1971).

Similar procedures were employed in the recruitment of clients for either program and in the initial orientation of all clients to the overall vocational evaluation process. The same referral form or Application for Special Services Center (Appendix A) and Biographical Data Form (Appendix B) was used with all clients. Upon entry into the program, each client was randomly assigned to one of the two vocational evaluators and received similar services (ie., the evaluation interview and appropriate psychological or psychometric tests) during the initial stages of the vocational evaluation

process. After these initial services were provided, the clients entered their respective vocational evaluation program (ie., either the program which used the JEVS System or the one which employed the model-based "system" of vocational evaluation) and remained in that program until their evaluation was completed.

Those clients assigned to the JEVS System received a vocational evaluation program that was based upon the procedures outlined in the JEVS Manual (1970). The JEVS Work Samples were administered in the manner and order specified by the Manual (ie., from the lowest to the highest Worker Trait Group and from the simplest to the more complex tasks within each of the ten Worker Trait Groups). Work sample data were recorded on the appropriate forms which accompanied the JEVS System. The results of a client's performance during vocational evaluation were synthesized into a final report by following the report format suggested in the JEVS Manual (1970). A copy of the final report on each client evaluated was submitted to the appropriate referral agency. Appendix C contains a sample copy of a Work Sample Evaluation Report completed on a client evaluated under the JEVS System. For the sake of anonymity, the clients' name and the names of other personnel have been either deleted or changed in this sample report.

Those clients assigned to the model-based program of vocational evaluation received a less structured and more individually-oriented program of services than those individuals assigned to the JEVS System. In addition to the use of biographical data, the evaluation interview, and psychometric or psychological tests, this model-based program placed emphasis upon the

following types of vocational evaluation technology: the TOWER System, the Singer/Graflex System, the SRA Job Experience Kits, and other work samples which were developed by the project staff. The Singer/Graflex Vocational Evaluation System was selected for use instead of the Tool Technology System since its content and format were more consistent with the overall goal of the vocational evaluation process and with the specific needs and interests of the clients served.

Although situational or workshop tasks and job tryouts were included in the Model for Vocational Evaluation (Nadolsky, 1971), they were not encompassed within the model-based "system" since they were generally unavailable and since the project's vocational evaluators felt confident of the results obtained on other vocational evaluation techniques and procedures. Likewise, informal conferences with other staff and the formal staff conference were not used to any great extent in the model-based "system" since other professional staff (ie., physicians, psychologists, social workers, and related disciplines), were not readily available to the vocational evaluation program. However, vocational counseling was a definite part of the model-based "system". It was performed by the vocational evaluators as the last step in the evaluation process in order to communicate and discuss the vocational evaluation findings with the client and to outline the procedures involved in the implementation of vocational evaluation recommendations.

Under the model-based "system" of vocational evaluation, clients were administered those work samples and/or occupational exploration procedures that were consistent with their interests and abilities. These tasks were

selected for administration on an individual basis, rather than in accordance with strict, system-based procedural requirements. All data were recorded on the appropriate forms which accompanied the specific work samples and/or occupational exploration procedures used. A narrative report with a listing of objective data was written on each client evaluated under the model-based "system". A copy of this report was submitted to the appropriate referral agency. Appendix D contains a sample copy of a final report on a client evaluated under the model-based "system" of vocational evaluation. In order to maintain anonymity, the client's name and the names of other personnel have been either deleted or changed in this sample report.

Professional Staff

The professional staff of this project consisted of a full-time project director, two full-time vocational evaluators, and three one-third time graduate research assistants. The Project Director possessed a doctors degree in Counselor Education and seven years of direct experience in vocational evaluation. He had previously set-up and directed a comprehensive vocational evaluation program in a private rehabilitation facility.

Both vocational evaluators possessed a masters degree and their combined direct experience in vocational evaluation was over five years. Prior to joining the project, they had been employed as vocational evaluators in rehabilitation facilities within the states of Alabama and Georgia. Both vocational evaluators had previously completed Auburn University's Regional Training Program in Vocational Evaluation, a six-week in-service training program for vocational evaluators employed within Region IV (ie., the eight southeastern states).

Although one of the vocational evaluators received prior training on the use of the JEVS System in Philadelphia, Pennsylvania, the other one did not have such training. An attempt was made to acquire JEVS System training for this evaluator, but due to a lack of vacancies in their training program he was unable to receive formal training on the use of the JEVS System. However, through self-instruction and working with the JEVS-trained evaluator, the evaluators untrained on the JEVS System became quite proficient in the use of that system. It should be noted that neither of the project's two vocational evaluators had received specific training on the use of the TOWER System, the Singer/Graflex System, the SRA Job Experience Kits, or related vocational evaluation methods and procedures. Rather, they became proficient in the use of these systems and methods through self-instruction, familiarity with vocational evaluation concepts, and experience.

Two of the three graduate research assistants were enrolled in a masters degree program at Auburn University (one in vocational evaluation and the other in physical education). The other graduate assistant was enrolled in Auburn University's doctoral program in Counselor Education. This latter individual was previously employed as a rehabilitation counselor and supervisor for over ten years in West Virginia.

The Project Director was primarily responsibly for establishing and maintaining the operational procedures for the two vocational evaluation programs set-up within the Special Services Center during this project. He was responsible for ordering the appropriate equipment and supervising its set-up and arrangement within the proper rooms. He also devised the

referral and follow-up forms and procedures that were employed throughout this investigation. Although the Project Director was not directly involved in the recruitment, evaluation, or follow-up of clients, he provided related assistance and direction to the other project staff. In addition to his general administrative and supervisory duties, the Project Director was responsible for writing the Interim Report and the Final Report of the project.

The two vocational evaluators were responsible for carrying out the entire vocational evaluation program of each client assigned to them. In order to control for the possible differential effects of the vocational evaluator's background and personality upon the outcome of the project's findings, both vocational evaluators were responsible for evaluating clients under either the JEVS System or the model-based "system". Clients were randomly assigned to each vocational evaluator in an attempt to equalize their work load. Random assignment also made it possible to control for biases that might be attributed to client selection by the evaluators. Consequently, the two vocational evaluators shared the daily work load of the project since they were each responsible for the total evaluation program of an essentially equal number of clients. The vocational evaluators were also responsible for writing the vocational evaluation report on each client that they evaluated.

The project's three graduate research assistants were primarily responsible for the recruitment of clients and the collection of follow-up data. They basically served as a liaison between the referral agencies, the clients, and the vocational evaluation program. For recruitment purposes, the graduate research assistants worked with various local agencies and also made the

initial contact with each potential client referred to the program. During this initial contact, the graduate research assistants explained the vocational evaluation program to the client, gathered pertinent biographical data, and recorded it on the Biographical Data Form (Appendix B). They also made arrangements for the clients to begin their vocational evaluation program on a specified date and assisted the clients in obtaining transportation to and from the program. When necessary, the graduate research assistants used their personal vehicles to transport clients to and from the vocational evaluation program. As clients completed their vocational evaluation program, the graduate research assistants were involved in helping the clients and the referral agencies to implement the vocational evaluation recommendations. They were also involved in the collection of follow-up data on each client evaluated under the project.

## DESCRIPTION OF THE POPULATION

The subjects of this study consisted of 65 unemployed individuals who were identified as culturally disadvantaged by personnel from the offices of the Division of Vocational Rehabilation, the U.S. Training and Employment Service, the Department of Public Welfare, and various public school systems throughout Lee and Russell County, Alabama. These 65 subjects represent those individuals who were referred to the project by one of the above-mentioned agencies and who actively participated in a vocational evaluation program at Auburn University. Other individuals who were referred to the project, but failed to participate or follow through with the program were not considered as subjects in this investigation.

Of the 65 subjects who participated in the project, 97 per cent were black and 3 per cent white. Sixty-five per cent of the subjects were female; while 35 per cent were male. The total sample ranged in age from 15 to 57, with a mean age of 21.2 and a median age of 19. The amount of formal education attained by the total sample ranged from 5 to 13 years, with a mean education level of 10.5 years and a median of 11 years of formal education.

The initial plan of this project was to include 60 subjects and to randomly assign an equal number of subjects (ie., thirty) to each of the two vocational evaluation systems under investigation. Due to an unexpected delay in acquiring the JEVS System, it was impossible to implement these plans and to maintain a random assignment of subjects to the two vocational evaluation systems. Consequently, the first 34 subjects who participated in the project were evaluated under the model-based "system". After the JEVS System was acquired and set up for operation, the next 31 subjects were evaluated under that system.

Since random assignment of subjects to the two vocational evaluation systems could not be achieved, it is essential to identify and analyze some of the basic similarities and differences between the subjects who received vocational evaluation services under each system. The results of this descriptive analysis are provided in Table 1.

Analysis of Table 1 shows that the sub-populations evaluated under each system were essentially equivalent on the variables of age, formal education, Beta I.Q., and reading and arithmetic grade level as measured by the Wide Range Achievement Test (WRAT). However, some slight differences between

TABLE 1

THE RANGE, MEAN, AND MEDIAN SCORES OF SUBJECTS
EVALUATED UNDER THE JEVS SYSTEM (N = 31)
AND THE MODEL-BASED SYSTEM (N = 34)
ON FIVE IDENTIFICATION VARIABLES

| VARIABLES | Vocational Evaluation System | | | | | |
|---|---|---|---|---|---|---|
| | JEVS | | | MODEL-BASED | | |
| | Range | Mean | Median | Range | Mean | Median |
| Age | 15 to 50 | 21.6 | 18 | 15 to 47 | 20.3 | 19 |
| Last Grade Completed | 5 to 13 | 10.2 | 10 | 6 to 13 | 10.8 | 11 |
| Revised Beta I.Q. | 50 to 111 | 81.8 | 82 | 33 to 104 | 84.5 | 85 |
| WRAT Reading Grade Level | 1.5 to 13.2 | 5.5 | 5.6 | KG 0.4 to 10.8 | 6.1 | 6.0 |
| WRAT Arithmetic Grade Level | 1.9 to 6.7 | 4.4 | 4.4 | PK 0.5 to 7.7 | 4.6 | 4.4 |

the two groups were noted. Table 1 indicates that the sub-population evaluated under the JEVS System had a slightly higher number of younger individuals than did the model-based sub-population. In terms of averages, the sub-population evaluated under the model-based "system" attained a slightly higher level of formal education, I.Q., reading grade level, and arithmetic grade level than did the JEVS sub-population. Since these differences were minimal, it is doubtful whether they could have had a significant effect upon the project's outcome.

The only other variables available to identify and compare similarities and differences between the two sub-populations were race and sex. On the variable of race, the sub-populations were equivalent since the racial composition of each group was 97 per cent black and 3 per cent white. On the other hand, there was a substantial difference between the two groups on the variable of sex. The JEVS sub-population was composed of 74 per cent females and 26 per cent males; while 56 per cent of the model-based sub-population was female and 44 per cent male. It is difficult to interpret the effects of the sex variable upon the project's outcome since in our society and family structure the male has traditionally assumed the dominant, "bread winner" role. However, in the black lower-class sub-culture the female has historically been the dominant, stabilizing, and supporting figure in the family (Rainwater, 1966).

Although it was impossible to control for the effects of selection on the assignment of clients to either system, the identification data showed that the two sub-populations were essentially equivalent. Consequently, it appears doubtful whether the limitation imposed by the inability to randomly assign

clients to either system would produce a substantial bias in the project's outcome.

On the other hand, a definite difference was noted between the sub-populations on the total number of days involved in their respective vocational evaluation program. The number of days that the JEVS sub-population was involved in vocational evaluation ranged from 3 to 8, with a mean of 6.3 days and a median of 7 days. The range, in days, of the model-based sub-population was from 4 to 10, with a mean of 8.7 days and a median of 9 days. These differences in the length of participation in each vocational evaluation program were probably the result of variations in the nature of the two vocational evaluation systems under investigation, rather than due to variations in the sub-populations themselves.

## VARIABLES STUDIED AND HYPOTHESES TESTED

### Variables Studied

The independent variable in this investigation consisted of the system of vocational evaluation offered to clients; while the dependent variable was the follow-up status of those clients evaluated under each system. Specifically, the two independent variables applied or manipulated in this study were the JEVS System and the model-based "system" of vocational evaluation. Two dimensions of the dependent variable were studied at a three month interval and at an eighteen month interval after the completion of vocational evaluation. These dimensions were the vocational status and the non-vocational status of clients evaluated under each system.

This investigation was essentially designed to study the relationship between the recommendations that resulted from the application of two different vocational evaluation systems and the follow-up status of those clients evaluated under each system. For the sake of utility, the recommendations and the follow-up status were both assigned to two categories; namely, vocational and non-vocational. Recommendations for employment, on-the-job training, and vocational training were compared with the vocational status of clients on follow-up. Recommendations for remedial education, adjustment training, and related personal services were compared with the non-vocational status of clients on follow-up. These comparisons were based upon data obtained at both a three month and an eighteen month follow-up interval.

Hypotheses Tested

In order to gain an initial understanding of the overall effectiveness of the two vocational evaluation systems employed with a culturally disadvantaged population in this investigation, it was necessary to describe the general types of recommendations that resulted from the application of these two systems, and the follow-up status of clients evaluated under each system. Thus, the initial questions posed in this investigation were as follows:

> Question 1: To what degree were different vocational and non-vocational recommendations made on clients evaluated by the two vocational evaluation systems under investigation?
>
> Question 2: To what degree did clients evaluated under each system attain a differential vocational and non-vocational status at three month and eighteen month follow-up intervals?

Since these questions could be answered through a descriptive analysis of the data, they did not require the formulation of hypotheses.

An additional concern of this study was to determine whether the predictions or recommendations made from the application of the two vocational evaluation systems were equally effective and accurate with a similar culturally disadvantaged population. Thus, a third question posed in this investigation was as follows:

> Question 3: What is the relationship between the recommendations made on clients evaluated by each system and the follow-up status of these clients? This question generated the following four null hypotheses:
>
> Hypothesis I: There is no significant difference between the vocational recommendations made on clients evaluated by the JEVS System and the model-based "system" and their vocational status as determined by the three month follow-up data.
>
> Hypothesis II: There is no significant difference between the vocational recommendations made on clients evaluated by the JEVS System and the model-based "system" and their vocational status as determined by the eighteen month follow-up data.
>
> Hypothesis III: There is no significant difference between the non-vocational recommendations made on clients evaluated by the JEVS System and the model-based "system" and their non-vocational status as determined by the three month follow-up data.
>
> Hypothesis IV: There is no significant difference between the non-vocational recommendations made on clients evaluated by the JEVS System and the model-based "system" and their non-vocational status as determined by the eighteen month follow-up data.

## DATA COLLECTION AND ANALYSIS

### Method of Data Collection

Throughout the duration of this study, standardized and specified procedures were maintained for the administration, scoring, and recording of information on each technique or method employed in either vocational evaluation system. The instructions for administering, scoring, and interpreting each instrument, as presented in the manual which accompanied the specific test, work sample, occupational exploration program, or other technique, were closely followed. The client's performance on each instrument was recorded on the appropriate scoring, rating, or recording forms. This information was placed in the client's folder and integrated into the vocational evaluation report of each client evaluated.

All procedures related to the evaluation of clients (including the interpretation of biographical data, the application of the evaluation interview, the administration of individual and group psychological and psychometric tests, the administration of work samples and occupational exploration procedures, and the use of vocational counseling techniques) were directly performed by the vocational evaluators. The vocational evaluators also wrote the final report on each client evaluated and submitted a copy of that report to the proper referral agency. A copy of the final report was also placed in each client's case record; while another copy was given to the proper graduate research assistant. The graduate research assistants worked with their respective clients and with the various referral agencies in an attempt to implement the vocational evaluation recommendations.

A Vocational Evaluation Follow-Up Form (Appendix E) was developed and used to record data related to the status of each client at intervals of three months and eighteen months after the completion of their vocational evaluation program. This form was also designed to record identification data on each client and to provide a summary of pertinent information about his performance in the vocational evaluation program (ie., the vocational evaluation system used, the results of certain psychological and psychometric tests, and the recommendations made). For each client, this case summary data was transferred from the case record onto the Vocational Evaluation Follow-Up Form. At the appropriate time interval, the graduate research assistants contacted either the client or the referral agency personnel in order to determine the follow-up status of each client evaluated. This information was then recorded on the Vocational Evaluation Follow-Up Form and used in data analysis.

Method of Data Analysis

All of the data analyzed in this investigation were contained on the Vocational Evaluation Follow-Up Form. The data analysis and related statistical computations were performed manually with the aid of an electronic calculator. The identification data contained on the Vocational Evaluation Follow-Up Form was analyzed to describe the population that participated in each of the two vocational evaluation programs. Each sub-population was described in terms of age, race, sex, intelligence quotient, reading grade level, arithmetic grade level, and last grade completed in school. Some of this identification data required the computation of frequencies and per cents

(ie., race and sex), but most of it involved the computation of range, mean, and median scores. The identification data was interpreted in the section of this report entitled "Description of the Population".

In addition to the identification data, the Vocational Evaluation Follow-Up Form contained information related to the recommendations made on each client and their follow up status. This data was classified into logical categories in order to facilitate the application of appropriate statistical methods. Statistical computations based upon these categories of nominal data were then performed.

The data related to the three questions and four hypotheses were based upon the recommendations made and the follow-up status of clients evaluated under either system. This data was analyzed in two distinct phases; namely, descriptive and analytic. The descriptive phase of this analysis involved the computation of frequencies and per cents for the data related to each of the questions and hypotheses. A chi-square statistic was employed during the analytic phase of this study to test each of the four null hypotheses. The .05 level of confidence was established as the criterion of rejection for each hypothesis.

## III. RESULTS

The purpose of this investigation was twofold: (1.) to describe and compare the types of recommendations made and the follow-up status of the two sub-populations evaluated under each vocational evaluation system and (2.) to determine whether significant differences existed in the predictive effectiveness of the two vocational evaluation systems. Consequently, the initial concern of this investigation focused upon the analysis of descriptive data; while the final purpose involved the analytic processing of data.

The data analyzed in the study were derived from (1.) the recommendations made on clients evaluated under each system and (2.) the follow-up disposition or status of these same clients at a three month and an eighteen month interval after the completion of their vocational evaluation program. All data used in this analysis was contained on the Vocational Evaluation Follow-up Form (Appendix E). The recommendations included in each vocational evaluation report were transferred onto the Follow-Up Form; while the follow-up status of clients at three month and eighteen month intervals was recorded on this same form.

### FINDINGS

#### Descriptive Data

In order to facilitate the descriptive analysis of data, the recommendations included on each Follow-Up Form were arranged into two logical

categories; namely, vocational and non-vocational recommendations. Within each of these two categories, all recommendations were classified according to their specific type and assigned to representative sub-categories. The four sub-categories used to classify all vocational recommendations were: (1.) direct placement, (2.) on-the-job training or vocational training, (3.) sheltered employment, and (4.) none. The following four sub-categories were used for the assignment of all non-vocational recommendations: (1.) remedial education, (2.) adjustment training, (3.) medical and related agency services, and (4.) none.

The follow-up data, as contained on the Vocational Evaluation Follow-Up Form, were arranged into the following two categories: (1.) vocational status and (2.) non-vocational status. Within each of these two categories, this data was assigned to appropriate sub-categories according to the disposition or status of each client at a three month and an eighteen month follow-up interval. All clients were assigned to one of the following five sub-categories based upon their vocational status at intervals of three months and eighteen months after the completion of their vocational evaluation program: (1.) competitively employed, (2.) involved in an on-the-job or vocational training program, (3.) employed in a sheltered setting, (4.) unemployed, or (5.) unable to locate. Clients were also assigned to one or more of the following five sub-categories according to the non-vocational services received in the interim between the completion of thier vocational evaluation program and the collection of three and eighteen month follow-up data: (1.) remedial education, (2.) adjustment training, (3.) medical and related agency services, (4.) none, and (5.) unable to locate.

Frequencies and per cents were computed for all descriptive data related to the recomendations made and the follow-up status of clients who participated in each of the two systems under investigation. These results were designed to answer the first two questions posed in this study by comparing and describing similarities and differences between the types of primary recommendations made and the follow-up disposition of the two sub-populations.

The first question posed in this investigation involved a descriptive analysis of the data related to the types of recommendations made. This question was as follows:

> Question 1: To what degree were different vocational and non-vocational recommendations made on clients evaluated by the two vocational evaluation systems under investigation?

Tables 2 and 3 provide a summarization of the data related to the types of primary recommendations made on the sub-populations evaluated under each system. They supply a descriptive answer to Question 1 by indicating the degree to which various types of vocational and non-vocational recommendations were respectively made on each sub-population.

Analysis of Table 2 shows that the sub-population evaluated under the model-based "system " received a higher proportion of recommendations for employment (competitive and sheltered) and for training (on-the-job or vocational) than did the JEVS sub-population. Althoug a definite vocational recommendation was made for every participant in the model-based program, approximately 20 per cent of the JEVS sub-population did not receive any vocational recommendation.

TABLE 2

THE FREQUENCY AND PERCENTAGE DISTRIBUTION FOR THE TYPES OF PRIMARY VOCATIONAL RECOMMENDATIONS EMANATING FROM THE APPLICATION OF TWO VOCATIONAL EVALUATION SYSTEMS WITH A CULTURALLY DISADVANTAGED POPULATION

| Primary Vocational Recommendation | Vocational Evaluation System | | | |
|---|---|---|---|---|
| | JEVS[a] | | Model-based[b] | |
| | N | Percent | N | Percent |
| Direct Placement | 21 | 67.8 | 26 | 76.5 |
| O.J.T or Vocational Training | 3 | 9.7 | 6 | 17.7 |
| Sheltered Employment | 1 | 3.2 | 2 | 5.8 |
| Total Primary Recommendations | 25 | 80.7 | 34 | 100.0 |
| No Recommendation Made | 6 | 19.3 | 0 | 0.0 |

a
N = 31
b
N = 34

As indicated in the JEVS Manual (1970), specific vocational recommendations are to be made when the participant passes a certain number of work samples within related Worker Trait Groups or when the work sample information enables the evaluation supervisor to determine whether the participant possesses potential for employment or training in an occupational area. Since a determination of vocational potential could not be made from the work sample information of six clients evaluated under the JEVS System, vocational recommendations were not included in their vocational evaluation report. On the other hand, the

techniques and procedures employed in the model-based program lacked specific guidelines for relating their results to vocational recommendations. Due to this situation, the vocational evaluators were given sufficient freedom to establish their own guidelines for the development of vocational recommendations. As a result of this freedom, at least one vocational recommendation was included in the vocational evaluation report of each client evaluated under the model-based "system".

Although more than one vocational recommendation was made for certain clients evaluated under each system (ie., a recommendation for either direct placement or for vocational training), only the primary vocational recommendation was listed in Table 2. The total number of vocational recommendations made on the JEVS sub-population was 30; while a total of 43 vocational recommendations were made on the model-based sub-population. Likewise, only the primary non-vocational recommendations were listed in Table 3 for each sub-population, although more than one non-vocational recommendation was made for certain clients evaluated under each system. The JEVS sub-population received a total of 32 non-vocational recommendations; while only 16 non-vocational recommendations were made for the model-based sub-population. These figures seem to reflect the lack of specific guidelines for non-vocational recommendations on the JEVS System as opposed to the more rigid guidelines related to the development of vocational recommendations for JEVS System participants. It also appears that when vocational evaluators are able to render vocational recommendations, they are less prone to include non-vocational recommendations in the vocational evaluation report.

Table 3 includes data related to the types of primary non-vocational recommendations made on participants in the JEVS program and the model-based program.

TABLE 3

THE FREQUENCY AND PERCENTAGE DISTRIBUTION FOR THE TYPES OF PRIMARY NON-VOCATIONAL RECOMMENDATIONS EMANATING FROM THE APPLICATION OF TWO VOCATIONAL EVALUATION SYSTEMS WITH A CULTURALLY DISADVANTAGED POPULATION

| Primary Non-Vocational Recommendation | Vocational Evaluation System | | | |
|---|---|---|---|---|
| | JEVS[a] | | Model-based[b] | |
| | N | Percent | N | Percent |
| Remedial Education | 9 | 29.1 | 6 | 17.7 |
| Adjustment Training | 6 | 19.3 | 6 | 17.7 |
| Medical and Related Services | 4 | 12.9 | 1 | 2.9 |
| Total Primary Recommedations | 19 | 61.3 | 13 | 38.3 |
| No Recommedation Made | 12 | 38.7 | 21 | 61.7 |

[a] N = 31

[b] N = 34

Inspection of Table 3 indicates that the JEVS sub-population received a higher percentage of non-vocational recommendations in each of the three sub-categories (remedial education, adjustment training, and medical or related agency services) than did the sub-population evaluated under the model-based "system". Table 3 also shows an inverse relationship between the two sub-populations with respect to the per cent of total non-vocational recommendations

made and the per cent of the sub-populations which did not receive a non-vocational recommendation. Consequently, that proportion of the JEVS sub-population which received a non-vocational recommendation was similar to the proportion of the model-based sub-population that did not receive a non-vocational recommendation.

Tables 2 and 3 provide an answer to Question 1 by showing a decided difference in the degree to which the two vocational evaluation systems enabled vocational and non-vocational recommendations to be made for a similar culturally disadvantaged population. The JEVS System was more prolific in rendering non-vocational recommendations; while a greater degree of voca-vocational recommendations resulted from the application of the model-based "system".

The second question posed in this investigation related to the follow-up disposition or status of the two sub-populations that received vocational evaluation under the JEVS System and the model-based "system". This question was as follows:

> Question 2: To what degree did clients evaluated under each system attain a differential vocational and non-vocational status at three month and eighteen month follow-up intervals?

The descriptive data related to this question are summarized in Tables 4 and 5. Table 4 provides information about the vocational status of the two sub-populations at intervals of three and eighteen months after the completion of their vocational evaluation program; while data related to the non-vocational status of these two sub-populations at the same follow-up intervals are contained in Table 5.

TABLE 4

THE FREQUENCY AND PERCENTAGE DISTRIBUTION FOR THE VOCATIONAL STATUS OF DISADVANTAGED CLIENTS EVALUATED UNDER THE JEVS SYSTEM AND THE MODEL-BASED SYSTEM AT FOLLOW-UP INTERVALS OF THREE AND EIGHTEEN MONTHS

| Vocational Status | System and Follow-Up Interval | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | JEVS System[a] | | | | Model-based System[b] | | | |
| | 3 Month | | 18 Month | | 3 Month | | 18 Month | |
| | N | % | N | % | N | % | N | % |
| Competitively Employed | 14 | 45.2 | 12 | 38.7 | 15 | 44.1 | 21 | 61.8 |
| In O.J.T. or Vocational Training | 2 | 6.4 | 1 | 3.2 | 0 | 0.0 | 0 | 0.0 |
| In Sheltered Employment | 0 | 0.0 | 0 | 0 | 0 | 0.0 | 0 | 0.0 |
| Unemployed | 14 | 45.2 | 14 | 45.2 | 19 | 55.9 | 8 | 23.5 |
| Unable to Locate | 1 | 3.2 | 4 | 12.9 | 0 | 0.0 | 5 | 14.7 |
| Total | 31 | 100.0 | 31 | 100.0 | 34 | 100.0 | 34 | 100.0 |

[a] N = 31

[b] N = 34

Table 4 indicates that a slightly higher percentage of the JEVS sub-population was either competitively employed or involved in an employment-related training program at the three month follow-up interval; while a higher percentage of the model-based sub-population was unemployed at the the three month interval. However, at an interval of eighteen months after the completion of their vocational evaluation program, approximately 62 per cent of the model-based sub-population was competitively employed; while only 42 per cent of the JEVS sub-population was either employed or involved in a related training program. The percentage of the JEVS sub-population that remained unemployed was identical at the three month and the eighteen month follow-up interval; while the rate of unemployment for the model-based sub-population was reduced by more than half in the interim between the collection of three month and eighteen month follow-up data.

The vocationally-related follow-up data also shows that only a small percentage of the JEVS sub-population became involved in an on-the-job or vocational training program and that none of the model-based sub-population participated in such a training program. In addition, none of the subjects from either sub-population became involved in sheltered employment throughout the duration of this study. It should be noted that the project team was unable to locate a similar number of subjects from either sub-population on follow-up.

The data encompassed within Table 4 essentially reveals that the JEVS System was more effective than the model-based "system" in helping to reduce the immediate rate of unemployment among disadvantaged clients.

However, the unemployment rate among JEVS participants remained unchanged from the three month to the eighteen month follow-up interval; while there was a substantial decrease in the rate of unemployment between the three month and the eighteen month follow-up interval for clients evaluated under the model-based system. Consequently, over an extended period of time, the model-based "system" was more effective than the JEVS System in assisting dis-disadvantaged clients to obtain and maintain gainful employment.

Table 5 provides a summarization of the data related to the non-vocational status of the JEVS and the model-based sub-populations at intervals of three months and eighteen months after the completion of their vocational evaluation program.

Analysis of Table 5 snows that the majority of participants in either vocational evaluation system did not receive non-vocational services after the completion of their program. The majority of subjects who received non-vocational services became involved in related programs during the interim between the completion of their vocational evaluation program and the collection of three month follow-up data. Since the JEVS sub-population received a greater number of non-vocational recommendations than the model-based sub-population, it could be expected that non-vocational services would be provided to a higher percentage of the JEVS sub-population. The follow-up data supports this expectation. The primary type of non-vocational service provided to the JEVS sub-population was remedial education; while either remedial education or adjustment training were received by a similar number of model-based participants.

TABLE 5

THE FREQUENCY AND PERCENTAGE DISTRIBUTION FOR THE NON-VOCATIONAL STATUS OF DISADVANTAGED CLIENTS EVALUATED UNDER THE JEVS SYSTEM AND THE MODEL-BASED SYSTEM AT FOLLOW-UP INTERVALS OF THREE AND EIGHTEEN MONTHS

| Non-Vocational Status | System and Follow-Up Interval | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | JEVS System[a] | | | | Model-based System[b] | | | |
| | 3 Month | | 18 Month | | 3 Month | | 18 Month | |
| | N | % | N | % | N | % | N | % |
| In Remedial Education | 10 | 32.3 | 3 | 9.7 | 2 | 5.9 | 1 | 2.9 |
| In Adjustment Training | 0 | 0.0 | 1 | 3.2 | 2 | 5.9 | 0 | 0.0 |
| Received Medical or Related Services | 1 | 3.2 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| No Services Received | 19 | 61.3 | 23 | 74.2 | 30 | 88.2 | 28 | 82.4 |
| Unable to Locate | 1 | 3.2 | 4 | 12.9 | 0 | 0.0 | 5 | 14.7 |
| Total | 31 | 100.0 | 31 | 100.0 | 34 | 100.0 | 34 | 100.0 |

[a] N = 31

[b] N = 34

An answer to Question 2 can be gleaned from the system-related differences among the data presented in Tables 4 and 5. This data indicates that the vocational status of the two sub-populations was similar in terms of the percentage involved in employment (competitive and sheltered) at the three month follow-up interval. A slightly higher percentage of the JEVS sub-population was involved in a training program (on-the-job or vocational) at the three month interval; while a higher percentage of the model-based sub-population was unemployed at that follow-up interval. On the other hand, a decided difference in employment was noted between the two sub-populations at the eighteen month follow-up interval. The unemployment rate for the JEVS sub-population was about twice as high as that of the model-based sub-population. Likewise, of those involved in competitive employment at the eighteen month interval, the model-based sub-population exceeded the JEVS sub-population by more than one-third.

Regarding non-vocational status, the JEVS sub-population was the recipient of a greater degree of non-vocational services, particularly remedial education, than the model-based sub-population. However, the majority of either sub-population did not receive any non-vocational service.

Analytic Data

The analytic phase of this investigation was designed to determine whether significant differences existed in the predictive effectiveness of the two vocational evaluation systems by studying the relationship between recommendations made and follow-up status of the sub-populations evaluated under each system. An answer to Question 3 was obtained from a descriptive analysis of

related frequency and percentage ratios; while the four null hypotheses generated by this question were tested through the application of chi-square tests of significance.

In order to answer Question 3, the vocational and non-vocational recommendations of each sub-population were respectively compared with their vocational and non-vocational status at intervals of three months and eighteen months after the completion of vocational evaluation. A comparison of the percentage distribution for the two sub-populations in Tables 6 through 9, inclusive, provides a descriptive answer to the third question. This question is stated below:

> Question 3: What is the relationship between the recommendations made on clients evaluated by each system and the follow-up status of these clients?

Four null hypotheses were generated by the third question. The first hypothesis was:

> Hypothesis I: There is no significant difference between the vocational recommendations made on clients evaluated by the JEVS System and the model-based "system" and their vocational status as determined by the three month follow-up data.

Table 6 provides a descriptive and analytic summary of the relationship between the vocational recommendations and vocational status of the two sub-populations at the three month follow-up interval.

Analysis of the percentage ratios in Table 6 shows that the vocational status of over half of the JEVS sub-population at the three month follow-up interval was directly related to their vocational recommendation; while this

TABLE 6

THE FREQUENCY AND PERCENTAGE DISTRIBUTION AND CHI-SQUARE VALUE ON THE DEGREE OF CONSISTENCY BETWEEN VOCATIONAL RECOMMENDATION AND VOCATIONAL STATUS AT A THREE MONTH FOLLOW-UP INTERVAL FOR THE TWO SUB-POPULATIONS

| Vocational Recommendation | Vocational Status Three Month Follow-Up Interval | | | | | | Chi-Square Value[c] |
|---|---|---|---|---|---|---|---|
| | Related | | Unrelated | | Total | | |
| | N | % | N | % | N | % | |
| JEVS System[a,b] | 16 | 53.3 | 14 | 46.7 | 30 | 100.0 | 7.36[d] |
| Model-based System | 7 | 20.6 | 27 | 79.4 | 34 | 100.0 | |
| Total | 23 | | 41 | | 64 | | |

[a] N = 30 (Unable to locate one participant on follow-up)

[b] N = 34

[c] df = 1

[d] $p < .01$

same relationship was evident for only one-fifth of the model-based sub-population. The chi-square value in Table 6 indicates that a significant difference ($p < .01$) was found between the vocational recommendations and vocational status of the two sub-populations at the three month follow-up interval. Consequnetly, the first hypothesis was rejected since there was a significantly higher degree of consistency between the vocational recommendations made on the JEVS

sub-population and their vocational status at the three month follow-up interval than was obtained by the model-based sub-population.

On the other hand, the difference between the two sub-populations may not be as significant as the data in Table 6 suggests since vocational recommendations were not made for six of the JEVS participants. Five of these six participants were unemployed at the three month follow-up interval and their vocational status was considered as being consistent with their vocational recommendation. Since the other participant was employed, his vocational status was considered as being unrelated to this vocational recommendation. However, even if these six participants were eliminated from this phase of data analysis, the vocational recommendations made on the JEVS sub-population would still be more consistent with their vocational status at the three month follow-up interval than that of the model-based sub-population.

The second hypothesis formulated under Question 3 was as follows:

> Hypothesis II: There is no significant difference between the vocational recommendations made on clients evaluated by the JEVS System and the model-based "system" and their vocational status as determined by the eighteen month follow-up data.

The descriptive and analytic data included in Table 7 provides a summary of the relationship between the vocational recommendations and vocational status of the two sub-populations at the eighteen month follow-up interval.

TABLE 7

THE FREQUENCY AND PERCENTAGE DISTRIBUTION AND CHI-SQUARE VALUE ON THE DEGREE OF CONSISTENCY BETWEEN VOCATIONAL RECOMMENDATION AND VOCATIONAL STATUS AT AN EIGHTEEN MONTH FOLLOW-UP INTERVAL FOR THE TWO SUB-POPULATIONS

| Vocational Recommendation | Vocational Status Eighteen Month Follow-Up Interval | | | | | | Chi-Square Value[c] |
|---|---|---|---|---|---|---|---|
| | Related | | Unrelated | | Total | | |
| | N | % | N | % | N | % | |
| JEVS System[a] | 7 | 25.9 | 20 | 74.1 | 27 | 100.0 | |
| Model-based System[b] | 15 | 51.7 | 14 | 48.3 | 29 | 100.0 | 3.89[d] |
| Total | 22 | | 34 | | 56 | | |

[a] N = 27 (Unable to locate four participants on follow-up)

[b] N = 29 (Unable to locate five participants on follow-up)

[c] df = 1

[d] $p < .05$

Inspection of the percentage ratios in Table 7 indicates that, at the eighteen month follow-up interval, the vocational status of slightly over one-half of the model-based sub-population was directly related to their vocational recommendation; while only about one-fourth of the JEVS sub-population attained a similar degree of consistency between vocational recommendation and vocational status. The chi-square value in Table 7 shows that a significant difference ($p < .05$) exists between the vocational recommendations and

vocational status of the two sub-populations at the eighteen month follow-up interval. Since there was a sginificantly higher degree of consistency between the vocational recommendations made on the model-based sub-population and their vocational status at the eighteen month follow-up interval than was found for the JEVS sub-population, it was necessary to reject the second hypothesis.

Of the six JEVS participants that did not receive a vocational recommendation, two remained unemployed at the eighteen month interval. These participants were assigned to the "Related" category. Three of these six participants were employed and were assigned to the "Unrelated" category; while the project staff was unable to locate the other participant at the eighteen month follow-up interval. Consequently, the difference between the two sub-populations might be slightly more significant than the data in Table 7 suggests if these participants were eliminated from this phase of data analysis.

A comparison of the data contained in Tables 6 and 7 shows an inverse relationship between the vocational recommendations and vocational status of the two sub-populations at the three month and the eighteen month follow-up interval. The vocational recommendations made on the JEVS sub-population were significantly more consistent with their vocational status at the three month follow-up interval; while the model-based sub-population attained a significantly higher degree of consistency between vocational recommendation and vocational status at the eighteen month follow-up interval.

The first two null hypotheses generated by Question 3 were based upon the relationship between the vocational recommendations and

vocational status of the two sub-populations at follow-up intervals of three months and eighteen months, respectively. Neither of these hypotheses were confirmed since significant differences were found between the sub-populations at both follow-up intervals. The third and fourth hypotheses generated by Question 3 were stated in the null form and focused upon the relationship between the non-vocational recommendations and the non-vocational status of the two sub-populations at respective follow-up intervals of three months and eighteen months. The third hypothesis is stated below:

> Hypothesis III: There is no significant difference between the non-vocational recommendations made on clients evaluated by the JEVS System and the model-based "system" and their non-vocational status as determined by the three month follow-up data.

Descriptive and analytic data related to the degree of consistency between the non-vocational recommendations and non-vocational status of the two sub-populations at the three month follow-up interval are presented in Table 8.

Analysis of the frequency and percentage distributions in Table 8 shows that the non-vocational status of approximately three-fourths of the model-based sub-population at the three month follow-up interval was directly related to their non-vocational recommendation; while this same relationship was evident for slightly more than two-thirds of the JEVS sub-population. Examination of the chi-square value in Table 8 indicates that only a slight difference was found between the non-vocational recommendations and non-vocational status of the two sub-populations at the three month follow-up interval. Since

TABLE 8

THE FREQUENCY AND PERCENTAGE DISTRIBUTION AND CHI-SQUARE VALUE ON THE DEGREE OF CONSISTENCY BETWEEN NON-VOCATIONAL RECOMMENDATION AND NON-VOCATIONAL STATUS AT A THREE MONTH FOLLOW-UP INTERVAL FOR THE TWO SUB-POPULATIONS

| Non-Vocational Recommendation | Non-Vocational Status Three Month Follow-Up Interval | | | | | | |
|---|---|---|---|---|---|---|---|
| | Related | | Unrelated | | Total | | Chi-Square Value[c] |
| | N | % | N | % | N | % | |
| JEVS System[a] | 20 | 66.7 | 10 | 33.3 | 30 | 100.0 | [d] |
| Model-Based System[b] | 25 | 73.5 | 9 | 26.5 | 34 | 100.0 | 0.36 |
| Total | 45 | — | 19 | — | 64 | — | |

[a] N = 30 (Unable to locate one participant on follow-up)

[b] N = 34

[c] df = 1

[d] $p > .05$

this chi-square value was not significant at the .05 level of confidence, the third hypothesis was confirmed.

The final hypothesis formulated under Question 3 was as follows:

> Hypothesis IV: There is no significant difference between the non-vocational recommendations made on clients evaluated by the JEVS System and the model-based "system" and their non-vocational status as determined by the eighteen month follow-up data.

Table 9 provides a descriptive and analytic summary of the relationship between non-vocational recommendations and non-vocational status of the two sub-populations at tne eighteen month follow-up interval.

TABLE 9

THE FREQUENCY AND PERCENTAGE DISTRIBUTION AND CHI-SQUARE VALUE ON THE DEGREE OF CONSISTENCY BETWEEN NON-VOCATIONAL RECOMMENDATION AND NON-VOCATIONAL STATUS AT AN EIGHTEEN MONTH FOLLOW-UP INTERVAL FOR THE TWO SUB-POPULATIONS

| Non-Vocational Recommendation | Non-Vocational Status Eighteen Month Follow-Up Interval | | | | | | Chi-square Value[c] |
|---|---|---|---|---|---|---|---|
| | Related | | Unrelated | | Total | | |
| | N | % | N | % | N | % | |
| JEVS System[a] | 17 | 63.0 | 10 | 37.0 | 27 | 100.0 | |
| Model-based System[b] | 23 | 79.3 | 6 | 20.7 | 29 | 100.0 | 1.86[d] |
| Total | 40 | ___ | 16 | ___ | 56 | ___ | |

[a] N = 27 (Unable to locate four participants on follow-up)

[b] N = 29 (Unable to locate five participants on follow-up)

[c] df = 1

[d] p > .05

Examination of the frequency and percentage distributions in Table 9 indicates that, at the eighteen month follow-up interval, the non-vocational status of approximately 80 per cent of the model-based sub-population was directly related to their non-vocational recommendation; while 63 per cent of the JEVS sub-population achieved a similar degree of consistency between non-vocational recommendation and non-vocational status. Although the model-based sub-population attained a higher degree of consistency between non-vocational recommendation and non-vocational status at the eighteen month follow-up interval, the chi-square value in Table 9 indicates that this difference between the two sub-populations was not significant at the .05 level of confidence. Consequently the fourth hypothesis was confirmed.

The data presented in Table 9 is designed to reflect the non-vocational services received by participants between the completion of thier vocational evaluation program and the eighteen month follow-up interval. For example, if remedial education was recommended for a participant and he was involved in a remedial education program at the three month follow-up interval, but not at the eighteen month interval, this participant was assigned to the "Related" category in Table 9. The decrease in number of participants included within the "Related" category from Table 8 to Table 9 was resultant from the project staff being unable to locate these participants at the eighteen month follow-up interval.

A comparison of the descriptive data in Tables 8 and 9 shows that the relationship between non-vocational recommendations and non-vocational

status was higher (but not to a significant degree) for the model-based sub-population than for the JEVS sub-population at both the three month and the eighteen month follow-up intervals. However, it should be noted that a non-vocational recommendation was made on 61.3 per cent of the JEVS sub-population, but only on 38.3 per cent of the model-based sub-population. These differences in the percentage of each sub-population that received a non-vocational recommendation should be taken into consideration when reviewing this data since those participants that did not receive either a non-vocational recommendation or a non-vocational service were assigned to the "Related" category. By giving consideration to these differences, the data encompassed within Tables 8 and 9 would appear to be somewhat inflated in favor of the model-based sub-population.

An answer to Question 3 can be developed by analyzing the relationships among the data presented in Tables 6 through 9, inclusive. The data essentially showed that the relationship between vocational recommendation and vocational status at the three month follow-up interval was significantly more consistent for clients evaluated by the JEVS System than for those evaluated under the model-based "system". However, at the eighteen month follow-up interval, clients evaluated under the model-based "system" attained a significantly higher degree of consistency between vocational recommendation and vocational status than did the JEVS System participants.

With respect to the relationship between non-vocational recommendation and non-vocational status, the data indicated that clients evaluated under the model-based "system" attained a slightly higher degree of consistency, at

both the three month and eighteen month follow-up interval, than did those evaluated by the JEVS System. However, due to the difference in the percentage of each sub-population that received a non-vocational recommendation, it is doubtful whether the model-based "system" was actually more productive than the JEVS System in assisting and enabling clients to engage in non-vocational services at either follow-up interval.

## IV. DISCUSSION AND IMPLICATIONS OF RESULTS

This study was undertaken to determine and compare the overall applicability and relative effectiveness of two vocational evaluation systems (the JEVS System and a model-based "system") when applied with a culturally disadvantaged population. The applicability of each system was determined primarily through the analysis of descriptive data related to the types of recommendations made and the follow-up status of disadvantaged clients evaluated under each system. The relative effectiveness of the two systems with a culturally disadvantaged population was analytically determined by comparing the degree of consistency between the recommendations made and the follow-up status of clients evaluated under each system.

The descriptive results of this study essentially showed that the model-based "system" was more productive than the JEVS System in rendering vocational recommendations; while the JEVS System was more prolific than the model-based "system" in providing recommendations of a non-vocational nature. With respect to follow-up status, a greater proportion of the JEVS sub-population was either employed or in training at an interval of three months after the completion of their vocational evaluation program; while a higher percentage of the model-based sub-population was unemployed at that follow-up interval. However, at an interval of eighteen months after the completion of vocational evaluation, the employment rate of the model-based

sub-population was about one-third higher than that of the JEVS sub-population. Likewise, the unemployment rate of the model-based sub-population was only about half as high as the JEVS sub-population at the eighteen month follow-up interval.

In addition to these descriptive results, significant differences were found between the two systems in their ability to render accurate vocational predictions. The data essentially showed that, over a brief span of time (ie., the three month follow-up interval), the JEVS System was significantly more capable of rendering consistency between vocational recommendations and vocational status than was the model-based "system". However, as the period of time was extended (ie., the eighteen month follow-up interval), the model-based "system" became significantly more capable than the JEVS System of attaining consistency between vocational recommendations and vocational status. On the other hand, the two systems did not differ significantly in their ability to render accurate non-vocational recommendations. In other words, significant differences were not found among the sub-populations evaluated under the JEVS System and the model-based "system" on the degree of consistency between non-vocational recommendations and non-vocational status at either the three month or the eighteen month follow-up interval.

## DISCUSSION

Based upon the results of this study, it appears that both the JEVS System and the model-based "system" are appropriate for use with the

culturally disadvantaged since there was a definite reduction in the unemployment rate among clients evaluated under either system. However, due to the lack of a control group, which did not receive any vocational evaluation service, it is impossible to determine the actual degree of effectiveness of either system. In a previous research study with the JEVS System (Jewish Employment and Vocational Service, 1968), two groups of culturally disadvantaged clients (an experimental and a control group) were matched on the variables of age, sex, and race, but differed significantly, in favor of the control group, on handicap status and school grade completed. In that investigation, the experimental group received vocational evaluation services under the JEVS System; while the control group received the normal type of counseling and placement service offered by the U.S. Training and Employment Service. The results of that study showed that the JEVS System was more effective than the traditional type of counseling and placement services in understanding the culturally disadvantaged and in assisting them to locate appropriate employment. Therefore, the lack of a control group in the present study may not constitute a serious limitation since either of the experimental sub-populations (ie., the JEVS sub-population or the model-based sub-population) would probably be better equipped than a similar control group to obtain and maintain appropriate gainful employment.

It should be noted that the research problem in this investigation was not designed to compare the relative effectiveness of either vocational evaluation system against a control group that did not receive vocational evaluation services. Rather, it was designed to determine whether the JEVS System

or the model-based "system" was more applicable and effective for use with a similar group of culturally disadvantaged clients. Several differences were noted between the two vocational evaluation systems under investigation which suggest that the two systems are not equally applicable or effective with a culturally disadvantaged population. These differences are discussed below.

A primary difference between the two systems related to the type and number of recommendations resultant from their application with a similar culturally disadvantaged population. Due to the structural or procedural guidelines incorporated into the JEVS System, vocational evaluators are restricted in their ability to render vocational recommendations for clients who fail to pass a given number of work samples within a particular Worker Trait Group. For this reason, vocational recommendations were not made on six clients evaluated under the JEVS System in this investigation, although half (three) of these individuals were gainfully employed at the eighteen month follow-up interval. Since the model-based "system" lacked specific guidelines for relating its results to vocational recommendations, at least one vocational recommendation was made on each client evaluated under that "system".

These findings suggest that when vocational evaluators are given the freedom to establish their own guidelines for the development of recommendations, they are prone to relate their evaluative findings to occupational or vocational areas. On the other hand, when vocational

evaluators are restricted in their ability to render vocational recommendations they display a definite tendency to develop recommendations of a non-vocational nature from the evaluative data. Unfortunately, at least three (about ten per cent) of the clients evaluated under the JEVS System in this investigation were obviously the victims of inappropriate system-related procedural guidelines since they obtained employment in the absence of a vocational recommendation. A number of other clients evaluated under either system were the recipients of non-vocational recommendations which apparently were not essential to their rehabilitation since they were engaged in gainful employment without being provided the recommended non-vocational service.

Although the degree of structure incorporated into the JEVS System definitely limits its applicability with certain clients, this same structure serves as an asset to the functional utility of the system. Due to the structural procedures and guidelines inherent within the JEVS System, only a limited amount of independent judgment is required to administer, score, and interpret the JEVS work samples. Unlike the model-based "system" (which is unstructured and demands a considerable degree of independent judgement to select and effectively use its techniques and procedures), the JEVS System can be readily and effectively applied by personnel with a limited amount of training in vocational evaluation. Further more, this structure serves to lessen the amount of time (ie., the average number of days) required to complete a vocational evaluation program.

Another basic difference between the two systems related to their effectiveness in assisting disadvantaged clients to attain a vocational objective.

The results of this study suggest that the JEVS System is slightly more effective than the model-based "system" in assisting the disadvantaged to attain immediate vocational goals (ie., competitive employment or employment-related training). On the other hand, the model-based "system" seems to be considerably more effective than the JEVS System in enabling disadvantaged clients to develop the vocational awareness necessary to obtain and maintain competitive employment over an extended period of time.

Finally, certain differences were noted in the predictive effectiveness of the two systems. Although only minimal differences were found between the two systems in their ability to provide accurate predictions of a non-vocational nature, the systems differed significantly in their ability to render accurate vocational predictions. The vocational predictions resultant from the application of the JEVS System were more accurate and relevant for immediate purposes, but they decreased in accuracy with time. On the other hand, the vocational predictions made on clients evaluated under the model-based "system" were relatively inaccurate over a brief period of time, but their accuracy and relevance improved to a significant degree with time.

These findings suggest that the primary goal of the JEVS System is to evaluate clients for immediate employment. The major goal of the model-based "system" seems to be the development of sufficient vocational and personal awareness within each client evaluated to enable them to

achieve a more lasting degree of vocational success. It appears that the JEVS System is not basically designed to assist the client in the development of personal awareness, self-evaluation, and vocational decision-making, but rather is concerned with enabling the vocational evaluator to render accurate predictions for immediate employment. Unlike the JEVS System, the model-based "system" seems to place a premium upon the development of personal awareness, self-evaluation, and vocational decision-making within the client and sacrifices the immediate predictive effectiveness of the vocational evaluator in order to achieve its primary goal.

## IMPLICATIONS

Although both the JEVS System and the model-based "system" are applicable to vocational evaluation programs for the culturally disadvantaged, certain findings in this investigation suggest that these two systems are differentially applicable to the vocational evaluation process. These findings suggest that the applicability and relevance of either system is highly dependent upon the specific purpose and objectives of a given vocational evaluation program. Consequently, if the purpose and objectives of a particular vocational evaluation program are to provide disadvantaged clients with information that can assist them in obtaining immediate and direct employment, rather than to equip them with a level of personal and vocational awareness necessary to obtain and maintain gainful employment over an extended period of time, then the JEVS System would be more applicable and relevant to that program. On the other hand, if a given vocational evaluation program is primarily concerned with enabling disadvantaged clients to develop personal and vocational insights

that are more deep in nature and that result in more lasting, effective vocational behavior, then the model-based "system" would be more applicable and relevant to that program.

Analysis of the JEVS System reveals that it cannot be considered a total system of vocational evaluation since its 28 work samples are related to only 20 areas of work that are encompassed within 10 different Worker Trait Groups. Obviously, the JEVS System does not provide the vocational evaluator with techniques and procedures that relate to the majority of occupational areas or Worker Trait Groups within the structure of either our nation's labor market or the Dictionary of Occupational Titles. Consequently, for maximum effectiveness and appropriate utilization, the JEVS work samples should not be expected to stand alone as an exclusive or inclusive system of vocational evaluation. Rather, it appears that they would be more effective if incorporated into the ongoing development of a complete, but eclectic, system of vocational evaluation.

The JEVS work samples are primarily structured around tasks that are routine and repetitive in nature and related to various types of assembly, collating, sorting, and tending work. For this reason, they seem to compliment, rather than conflict with, the techniques and procedures encompassed within other systems or approaches to vocational evaluation (ie., the TOWER System, the Singer/Graflex System, the Tool Technology System, and the Job Experience Kits). Consequently, most of the JEVS work samples could be readily incorporated into the development of a total system of vocational evaluation.

Regardless of whether the JEVS work samples are to be used as a self-contained system or incorporated into the development of a more complete system of vocational evaluation, it appears that certain sections of its existing procedural guidelines should be either revised or made optional. The major changes that need to be made in the JEVS System's procedural guidelines relate to the standards established for the derivation of vocational recommendations from the work sample data. Based upon the results of this study, the existing standards for interpretation of the JEVS work samples appear to be set too high since approximately ten per cent of the JEVS clients did not meet these standards (and, therefore, did not receive a vocational recommendation), but they were engaged in competitive employment at the eighteen month follow-up interval.

The majority of individuals who employ the JEVS work samples as a self-contained system are probably either untrained or marginally trained in vocational evaluation. Since these individuals lack the background essential to independently integrate and synthesize vocational evaluation data, they need to be provided with relatively strict procedural guidelines to follow their daily work. In order to increase the predictive effectiveness of vocational evaluation personnel (untrained, marginally trained, or highly trained) who apply the JEVS work samples as a self-contained system, it appears that the existing standards for work sample interpretation in the JEVS System should be analyzed for possible downward revision.

The results of this study suggest that trained vocational evaluators are more effective when given the freedom to establish their own guidelines for

the development of recommendations from the evaluative data. When this freedom is provided, the trained vocational evaluator takes the initiative to relate his findings primarily to vocational, rather than non-vocational recommendations. Even when required to follow strict procedural guidelines for the development of vocational recommendations, but not for the establishment of non-vocational recommendations, the trained vocational evaluator utilizes the freedom provided by the system to relate his evaluative data to non-vocational recommendations. Thus, it appears that the freedom to exercise clinical judgement is an ingredient that is essential to the functioning of the trained vocational evaluator.

The majority of trained vocational evaluators would probably choose to employ the JEVS work samples as part of a more complete vocational evaluation system since they are concerned with offering a vocational evaluation program that is broad in scope, flexible, and based upon the individual needs of the client. For this reason, most trained vocational evaluators would base the selection and application of techniques and procedures (including the JEVS System) upon the needs of their clients, rather than upon a set of strict procedural guidelines. In order to provide the trained vocational evaluator with a number of highly useful work samples that can be effectively employed on an individual basis, it appears that the guidelines for systematic and administration and interpretation of the JEVS System should be made optional. In other words, the procedural guidelines incorporated into the JEVS System should not limit the functional utility of the system by requiring trained vocational evaluators to maintain

a hierarchial order for work sample administration or by placing restrictions upon their ability to use and interpret the work sample data.

Most of the issues derived from the data were analyzed and discussed in terms of their relationship to the practice of vocational evaluation. However, certain findings also provide information that has a direct bearing upon the development of vocational evaluation theory. Although tangential to the present research problem, these implications for theory are worthy of discussion since vocational evaluation is a relatively new discipline which lacks an established theoretical structure. A meaningful and research-based theoretical structure is essential to the maintenance of relevant and consistent practice within the field of vocational evaluation.

The comparative results of this investigation suggest that when the techniques and procedures encompassed within a given vocational evaluation system are presented and interpreted in a predetermined manner, in a previously specified order, and in a highly controlled environment, vocational evaluators develop a tendency to ignore the individuality of their clients and view them as passive objects for manipulation or movement through the system. When this situation exists, many clients are evaluated against the demands of tasks that are often irrelevant and inconsistent with their interests and needs. The vocational evluation process does not provide most clients with the opportunity to adequately explore and express themselves on meaningful tasks and activities. It does not confront the client with his own vocational assets and limitations, but focuses upon the demands of the immediate situation. It does not enable the client to discover or understand the relationship between personal abilities

and occupational requirements, but places emphasis upon the acquisition of data that is meaningful only to the evaluator. Finally, the vocational evaluation process does not require the client to make choices or to engage in relevant decision-making behavior, but suggests to the client that his vocational future is to be decided by others. The results of this study point out that when disadvantaged clients are evaluated within the confines of a highly structured and ordered system, a degree of immediate vocational success is achieved, although the chance of maintaining vocational success decreases significantly with time.

On the other hand, when the techniques and procedures of a vocational evaluation program are varied and diverse, selected on the basis of the individual needs of each client, and analyzed in accordance with overall guidelines established by the evaluator, there is a tendency for the vocational evaluator to view the client as an active partner in a process that is designed for him and that requires his full participation. Under such a program, clients are evaluated on tasks that are meaningful to them and that require active and personal involvement. The vocational evaluation process focuses upon individual exploration and self-expression on tasks and activities that are consistent with the needs, abilities, and interests of the client. It is designed to confront the client with his own vocational assets and limitations, rather than placing emphasis upon the systematic utility of the task at hand. Through his involvement on meaningful tasks and activities, the client is provided with the opportunity to gage his own

performance and to discover and understand the meaning of his personal abilities in relation to occupational requirements. Rather than being solely concerned with the acquisition of data, the vocational evaluator serves as the catalyst that enables the client to make choices or to engage in relevant decision - making behavior. Under such a vocational evaluation program, confrontation and decision-making are stressed since it is the client who must understand, choose, and assume the responsiblity for his own vocational future. The results of this study indicate that when disadvantaged clients are evaluated under a system that is responsive to their needs and that focuses upon self-evaluation, their chances of achieving lasting vocational success is enhanced, although immediate vocational success may be difficult to attain.

Based upon the foregoing analysis of the nature and scope of two distinct vocational evaluation systems and the consequence of their application with a culturally disadvantaged population, certain conclusions emerge which relate to the developments of vocational evaluation theory. These conclusions suggest that the degree of success achieved by a vocational evaluation program varies in accordance with the temporal criteria established for the measurement of success. It can be theoretically assumed that when success is measured against immediate criteria, a highly structured, ordered, and evaluator-centered vocational evaluation system will be more effective than a less structured, but individualized, client-centered system. However, opposite results are expected when success is measured against more distant, long range criteria.

Furthermore, the nature of a vocational evaluation program offered to clients varies in accordance with the amount of structure imposed upon the

vocational evaluator by that program. From a theoretical point of view, it can be assumed that when vocational evaluators are required to operate within the confines of a highly structured and ordered system, they will ignore the client's individuality and focus upon system-related goals. But when required to operate within a less structured system, vocational evaluators will attempt to understand their clients by confronting them with their own vocational assets and limitations on tasks that are directly related to the client's own interests, needs, abilities, and goals.

On final implication of a theoretical or philosophical nature should be noted. This implication relates to the selection of a title to accurately identify the discipline in question. The results of this study lend support to the conclusion presented by Nadolsky (1972) in a discussion of certain connotations that underly the selection of an appropriate title. The following implications are directly related to the findings of this study:

> . . . . . , the titles "work evaluation" and vocational evaluation" appropriately identify the central purpose of our discipline. However these two titles have different philosophical and temporal connotations. Philosophically, the term "work evaluation" suggests that our discipline is a rather narrowly conceived area of specialization which focuses upon the techniques used to determine the most appropriate type of work for each individual client. In contrast, the term "vocational evaluation" implies that our discipline maintains a broad philosophical perspective which places emphasis on uncovering the methods and procedures that must be employed to maximize the individual's vocational development through time.
>
> The connotation of "work evaluation" is one which relates to the immediate future since work is an immediate goal for most individuals in our society. On the other

hand, the implication of the term "vocational evaluation" is that our discipline is primarily concerned with the more distant future since a vocation is a lifetime pursuit.

Due to the recent emphasis upon vocational development theory and the establishment of career education and evaluation programs within the public school system, it appears that the most appropriate title for our discipline would be "vocational evaluation". The use of this title suggests that our area of specialization is concerned more with the individual's vocational development through time than with his immediate placement in the labor market. (pp. 6 - 7).

## V. SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

### SUMMARY

The purpose of this study was to compare the overall effectiveness of a vocational evaluation system designed specifically for a culturally disadvantaged population (ie., the JEVS System) with a more eclectic "system" that incorporated those techniques and procedures normally employed by vocational evaluators in rehabilitation facilities. The latter "system" was based upon the Model for Vocational Evaluation as presented and discussed in the Interim Report of this project (Nadolsky, 1971). The present research problem was concerned with determining whether those techniques and procedures that have been traditionally used in vocational evaluation programs with a disabled population are applicable to the culturally disadvantaged when assimilated and employed within the structure of a model-based vocational evaluation "system". However, the major concern of this study was to determine whether the model-based "system" or the JEVS System was more applicable and effective for use in vocational evaluation with a culturally disadvantaged population.

The primary criteria used to determine the overall applicability of the two systems under investigation were the types of recommendations made and the follow-up disposition of disadvantaged clients evaluated by either system. The degree of consistency between the recommendations

made and the follow-up status of disadvantaged clients evaluated under each system was the criteria used to determine the relative effectiveness of the two systems.

Based upon the information presented in the Interim Report (Nadolsky, 1971) of this project, a model-based "system" of vocational evaluation was established and maintained within a separate room located in the Special Services Center on the Auburn University campus. After several months delay in acquiring the JEVS System, that system was obtained and set-up for operation in an adjacent, but separate, room within the Special Services Center. The staff assigned to the project included a Project Director, two experienced vocational evaluators, three graduate research assistants, and a secretary. The duties of each staff member were maintained, as assigned, throughout the duration of the project.

All of the 65 subjects who participated in this study were unemployed and identified as culturally disadvantaged by one of the following referral agencies: the Division of Vocational Rehabilitation, the U.S. Training and Employment Service, the Department of Public Welfare, and various public school systems throughout Lee and Russell County, Alabama. Due to an unexpected delay in acquiring the JEVS System, it was impossible to randomly assign the subjects to the two vocational evaluation systems. For this reason, the first 34 subjects who participated in the project were evaluated under the model-based "system"; while the remaining 31 subjects (those who were later referred to the project) were evaluated under the JEVS System.

Although random assignment could not be achieved, the sub-populations that received vocational evaluation under either system were similar on the variables of age, race, formal education, Beta I.Q., and reading and arithmetic

grade level as measured by the Wide Range Achievement Test. The JEVS sub-population, had a higher percentage of females than did the model-based sub-population, but due to differences in the role expectation for females in a white middle class sub-culture and in a black lower class sub-culture it was difficult to interpret the effects of the sex variable on the project's outcome. Except for the difference noted on the variable of sex, the two sub-populations were essentially equivalent. Consequently, it was felt that the effects of selection would not impose serious limitations upon, or create a substantial bias in, the project's outcome.

Throughout the duration of this study, standardized procedures were maintained for administering, scoring, and recording information on each technique employed in either vocational evaluation system. Upon completion of their program, this evaluative data was incorporated into a vocational evaluation report on each client processed through either system. One copy of the vocational evaluation report was submitted to the appropriate referral agency, another copy was retained in the client's case record, and a third copy was given to the proper graduate research assistant. In an attempt to implement the vocational evaluation recommendations, the graduate research assistants worked with both the client and the referral agency.

The data of this study consisted of the types of vocational and non-vocational recommendations made and the vocational and non-vocational disposition of clients evaluated under either system at follow-up intervals of three and eighteen months after the completion of their program. All

of the data analyzed in this study was recorded on a Vocational Evaluation Follow-Up Form (Appendix E).

The three questions posed in this study were designed to describe similarities and differences between the two systems with respect to (1.) the types of recommendations made on each sub-population, (2.) the follow-up disposition or status of clients evaluated under each system, and (3.) the relationship between the recommendations made and the follow-up disposition of each sub-population. Four null hypotheses were generated by the third question. They were designed to ascertain differences between the sub-populations on the relationship between the recommendations made (vocational and non-vocational recommendations) and the follow-up status (vocational and non-vocational status) at intervals of three months and eighteen months after the completion of vocational evaluation.

All of the data were processed manually with the aid of an electronic calculator. Frequencies and per cents were computed for all descriptive data; while chi-square tests of significance were employed to test each of the four null hypotheses. The .05 level of confidence was established as the criterion of rejection for each hypothesis.

The results of this study showed that the model-based "system" was more productive in developing vocational recommendations; while a greater number of non-vocational recommendations resulted from the application of the JEVS System. Although the JEVS System was more effective in enabling disadvantaged clients to attain immediate employment, a higher percentage of clients evaluated under the model-based "system" were able to attain and

maintain gainful employment over a more extended time interval. Since non-vocational recommendations were made on a greater number of JEVS System participants, it was expected that a higher percentage of the JEVS sub-population would be the recipients of non-vocational services. This expectation was confirmed, but not to a substantial degree.

The two null hypotheses concerned with the ability of each system to render equally accurate vocational predictions were rejected since the data indicated that the JEVS System was significantly more capable of rendering consistency between vocational recommendations and vocational status over a brief span of time; while the vocational status of the model-based "system's" participants was significantly more consistent with their vocational recommendations over an extended period of time. Since the two systems did not differ significantly in their ability to render accurate non-vocational recommendations, the third and the fourth null hypotheses were both confirmed. These descriptive and analytic results and their implications were discussed in detail.

## CONCLUSIONS

In view of the purpose, limitations, and findings of this study, the following conclusions are justified:

1. When incorporated into a model-based vocational evaluation "system", the techniques and procedures normally used with a disabled population are applicable to the culturally disadvantaged.

2. Both the JEVS System and the model-based "system" are appropriate for use in vocational evaluation programs designed for the culturally disadvantaged since both systems assist in reducing the rate of unemployment among this population.

3. The degree of applicability and relevance of the JEVS System and the model-based "system" is highly dependent upon the specific purpose and objectives of a particular vocational evaluation program. The JEVS System is more applicable and relevant to a vocational evaluation program that is designed to assist clients in obtaining immediate and direct employment; while the model-based "system" is more applicable to programs which emphasize the development of personal and vocational awareness in order to effect a more lasting degree of vocational success.

4. Due to its strict guidelines for the development of vocational recommendations from the work sample data, vocational recommendations are not provided on certain clients evaluated under the JEVS System. However, these clients may possess the potential to engage in competitive employment.

5. When the structure of a vocational evaluation system limits the ability of vocational evaluators to render vocational recommendations, they demonstrate a definite tendency to develop recommendations of a non-vocational nature from the evaluative data.

6. The degree of success achieved by a vocational evaluation program varies in accordance with the temporal criteria established for the measurement of success.

7. The nature of a vocational evaluation program offered to clients varies in accordance with the amount of

structure imposed upon the vocational evaluator by that program.

8. The title selected to identify the discipline of vocational evaluation should be consistent with the nature, purpose, and goals of that discipline.

## RECOMMENDATIONS

Based upon the results of this study, the following recommendations are made:

1. That certain sections of the JEVS System's procedural guidelines be either revised or made optional. The primary section that needs to be revised relates to the standards established for work sample interpretation. These existing standards should be analyzed for possible downward revision. In addition, the guidelines for administration and interpretation of the JEVS work samples should be made optional to the trained and/or experienced vocational evaluator .

2. That consideration be given to allowing trained and/or experienced vocational evaluators to use the JEVS work samples on an individual basis and as part of a more complete system of vocational evaluation, rather than requiring that they be employed within a strict hierarchial order and as a self-contained system.

3. That vocational evaluation practitioners take the initiative to identify and define those concepts that are central to the growth and development of their discipline as a unique, but consistent, entity. Primary consideration should be given to the establishment of an accurate and agreed upon title for their disciplines.

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# APPENDICES

APPENDIX A

APPLICATION FOR

SPECIAL SERVICES CENTER

Room: 1122 Haley Center
Auburn University
Phone: 826-5943

Date: _____

Organization Referred by: _____

Please omit items not applicable.

NAME: _____ SOCIAL SECURITY NUMBER: _____

ADDRESS: _____ CITY: _____

PHONE: _____ SEX: _____ DATE OF BIRTH: _____ AGE: _____

PLACE OF BIRTH: _____

Single-Married-Separated-Divorced-Widowed
STATUS: _____ NUMBER OF CHILDREN: _____ AGES: _____

LAST GRADE COMPLETED: _____ SCHOOL & CITY: _____

LAST EMPLOYMENT HELD: _____

WHAT TYPE OF TRAINING OR EMPLOYMENT ARE YOU INTERESTED IN: _____

_____

LIST ANY PHYSICAL DISABILITIES: _____

_____

WHAT SERIOUS INJURY OR ILLNESS HAVE YOU HAD: _____

_____

DO YOU HAVE ANY HEALTH CONDITION THAT WOULD PREVENT YOU FROM WORKING: _____

_____

ARE YOU PRESENTLY TAKING ANY MEDICATION: _____ SPECIFIC TYPE: _____

IN CASE OF EMERGENCY WHOM MAY WE CONTACT: _____

NAME: _____ RELATIONSHIP: _____

ADDRESS: _____ CITY: _____ PHONE: _____

REFERRED BY: SIGNATURE _____

APPENDIX B

BIOGRAPHICAL DATA FORM

GENERAL INFORMATION

NAME: _____ REFERRED BY: _____

ADDRESS: _____ REASON FOR REFERRAL: _____

PHONE NUMBER: _____ REFERRAL DATE: _____

SOCIAL SECURITY NUMBER: _____ SEX (circle): M F

DATE OF BIRTH: _____ AGE: _____

HEIGHT: _____ WEIGHT: _____

PARENT OR GUARDIAN: _____

DATE OF ENTRY INTO PROGRAM: _____

MEDICAL INFORMATION

MAJOR DISABILITY (functional): _____

CAUSE (diagnosis): _____

DATE OF ONSET: _____

MINOR DISABILITY (S) (functional): _____

CAUSE (diagnosis): _____

DATE OF ONSET: _____

GENERAL PHYSICAL ASSETS: _____

GENERAL PHYSICAL LIMITATIONS: _____

PREVIOUS RELEVANT MEDICAL SERVICES: _____

MEDICAL PRECAUTIONS OR CONTRAINDICATIONS: _____

SOCIAL INFORMATION

CIRCLE: Single Married Separated Divorced Widowed

DEPENDENTS (Number): _____ NEXT OF KIN: _____

SIBLINGS (Number): _____ RELATIONSHIP: _____

FAMILY LIFE (Describe his reaction toward other family members): _____

_____

_____

COMMUNITY LIFE (Describe his behavior as a neighbor and as a community member):

_____

_____

_____

RELIGIOUS BELIEFS (Describe his beliefs and related behavior): _____

_____

_____

RECREATIONAL ACTIVITIES (List & Describe): _____

_____

_____

PSYCHOLOGICAL INFORMATION

MAJOR BEHAVIORAL PROBLEMS (functional): _____

_____

CAUSE (Diagnosis): _____

DATE OF ONSET: _____

MINOR BEHAVIORAL PROBLEMS (functional): _____

_____

CAUSE (Diagnosis): _____

DATE OF ONSET: _____

GENERAL PSYCHOLOGICAL ASSETS: _____

_____

GENERAL PSYCHOLOGICAL LIMITATIONS: _____

_____

PREVIOUS RELEVANT PSYCHOLOGICAL SERVICES: _____

_____

BEHAVIORAL PRECAUTIONS OR CONTRAINDICATIONS: _____

_____

_____

EDUCATIONAL INFORMATION

LAST GRADE COMPLETED: _____ YEAR COMPLETED: _____

SCHOOL: _____ CURRICULUM: _____

REASON TERMINATED: _____

OPPORTUNITIES FOR EDUCATION OR TRAINING (Describe): _____

_____

_____

SPECIALIZED EDUCATION OR TRAINING RECEIVED (Describe): _____

_____

_____

LENGTH OF COURSE: _____ DATES: _____

COURSE (Circle): COMPLETED TERMINATED

IF TERMINATED, LIST REASON (S): _____

_____

PRESENT EDUCATIONAL ASSETS OR ABILITIES: _____

_____

PRESENT EDUCATIONAL LIMITATIONS OR DEFICIENCIES: _____

_____

HOBBIES (Describe): _____

_____

VOCATIONAL INFORMATION

IS THERE A HISTORY OF EMPLOYMENT (Circle): YES NO

IF NO, EXPLAIN WHY: _____

_____

IF YES, LIST EACH POSITION BELOW, BEGINNING WITH MOST RECENT JOB (Include Military Service):

1. POSITION: _____ EMPLOYER: _____

   DUTIES: _____

   INCOME: $_____/year DATES OF EMPLOYMENT (Month & Year): _____

   REASON FOR LEAVING: _____

   _____

2. POSITION: _____ EMPLOYER: _____

   DUTIES: _____

   INCOME: $_____/year DATES OF EMPLOYMENT (Month & Year): _____

   REASON FOR LEAVING: _____

   _____

3. POSITION: _____ EMPLOYER: _____

   DUTIES: _____

   INCOME: $_____/year DATES OF EMPLOYMENT (Month & Year): _____

   REASON FOR LEAVING: _____

   _____

EARNINGS BETWEEN 19 __ and 19 __ RANGE FROM $_____ IN 19__ to $_____ IN 19__.

AVERAGE ANNUAL EARNINGS WERE APPROXIMATELY $_____ PER YEAR.

PRESENT VOCATIONAL ASSETS OR ABILITIES: _____

_____

PRESENT VOCATIONAL LIMITATIONS OR DEFICIENCIES: _____

_____

ECONOMIC INFORMATION

AMOUNT OF PRESENT INCOME: _____

SOURCE OF PRESENT INCOME: _____

UTILIZATION OF PRESENT INCOME (Describe): _____

_____

OPPORTUNITIES AVAILABLE TO INCREASE INCOME LEVEL (Describe): _____

_____

_____

POSSIBLE SITUATIONS THAT MAY REDUCE INCOME LEVEL (Describe): _____

_____

_____

WHAT ARE HIS ECONOMIC ASPIRATIONS (Describe): _____

_____

ARE THEY REALISTIC (Explain): _____

_____

APPENDIX C

WORK SAMPLE EVALUATION REPORT

NAME Wanda White PROGRAM Auburn University DATE: June 30, 1971

REFERRING AGENCY Pensions and Security REFERRING COUNSELOR Mrs. Green

EVALUATOR _____ EVALUATION SUPERVISOR _____

LEGEND FOR RATING

Variables are rated on a 5 point scale

1. Variables receiving a rating of one (1) are behaviors and performance unacceptable even in a highly structured, supportive, noncompetitive work setting with little present evidence or indication that improvement can be achieved.

2. Variables receiving a rating of two (2) are behaviors and performances which suggest that the participant is achieving below the level of a highly structured, supportive, noncompetitive work setting. However, there are indications that with continued support he may be able to function within such a work setting.

3. Variables receiving a rating of three (3) are behaviors and performances characteristic of a participant functioning satisfactorily in a highly structured, supportive noncompetitive work setting.

4. Variables receiving a rating of four (4) are behaviors and performances which indicate the potential to achieve at and approach the criteria of vocational training and/or competitive employment (entry level).

5. Variables receiving a rating of five (5) are demonstrated behaviors and performances commensurate with standards of a superior worker in competitive industry or an excellent candidate for vocational training.

X. This rating should be used only in those cases where the indicated behaviors or variables have not been observed.

I. GENERAL OBSERVATIONS:

A. Physical Appearance:

1. Grooming. . . . . 1 2 3 4 (5) X
2. Work Attire. . . . . 1 2 3 (4) 5 X
3. Comments (describe):

Clean, neat, clothes well kept; really cared about how she looked; not consistent with what she wore; skirt and blouse one day, pants and shirt tail out next day.

B. Observations Related to Physical and/or Emotional Problems:

1. Previously recorded physical and/or emotional problem(s): None

2. Observed physical and/or emotional problem(s): None

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3. Effect of problem(s) upon work performance: None

C. Communication:
1. Conversation: Verbose ____ Normal X Reticent ____
2. Ability to express oneself. . . . . 1 2 3 (4) 5 X
3. Comments (describe-articulation, tone of voice, grammatical usuage,etc.)

Talked slowly and carefully; low tone of voice; easy to understand her words. Speaks clearly.

II. BEHAVIOR IN INTERPERSONAL SITUATIONS:

A. With Co-Workers:
1. Cooperativeness. . . . . 1 2 (3) 4 5 X
2. Relationship with Males. . . . . 1 2 3 (4) 5 X
3. Relationship with Females. . . . . 1 2 3 (4) 5 X
4. Comments (describe):

Didn't associate with other males much, perhaps because she's almost twice their age; good relationship with girls; sets good example for other workers.

B. With Supervisors:
1. Cooperativeness (social judgement). . . . . 1 2 3 4 (5) X
2. Reaction to Criticism. . . . . 1 2 3 4 (5) X
3. Reaction to Praise. . . . . 1 2 3 (4) 5 X
4. Comments (describe):

Very cooperative; always did what was asked of her without delay; wanted to do well; needed some reinforcement from supervisor because of apparent insecurity about ability to perform jobs; continually had to have directions repeated.

III. WORKER CHARACTERISTICS:

A. Self-Image as a Worker. . . . . 1 (2) 3 4 5 X
B. Work Attitude. . . . . 1 2 3 (4) 5 X
C. Ability to Work Under Pressure. . . . . 1 2 (3) 4 5 X
1. Frustration Tolerance
Rarely upset X Occasionally upset ____ Easily upset ____
2. Persistence
Rarely gives up X Occasionally gives up ____ Gives up easily ____

D. Dependability:
1. Punctuality. . . . . 1 2 3 (4) 5 X
Number of Latenesses 1 Unexcused 1
2. Attendance. . . . . 1 2 3 4 (5) X
Total Absences 1 Unexcused 0

WSER-2 Rev. Aug., 1969

E. Amount of Supervision Required. . . . . 1 2 (3) 4 5 X

1. Self-Reliance
   Independent____ Needs Occasional Support____ Dependent X
2. Initiative
   Self-Starter__ Needs Occasional Prodding X Needs Constant Prodding___

F. Comments (describe): (See comments II B). Often asked for clarification of instructions; started work immediately if she understood directions; occasionally needed assistance during work, especially during last work sample; verbalized some confidence in ability to perform jobs but still sought supervisory guidance and reassurance.

G. Learning and Comprehension:

1. Ability to follow instructions: (verbal, written & diagrammatic)____

Follows written instructions as well as verbal; verbal instructions often needed repeating; follows diagrammatic okay.

2. Attention Span. . . . . 1 2 3 4 (5) X
3. Speed of Learning. . . . . 1 2 (3) 4 5 X
4. Retention of Instructions. . . . . 1 (2) 3 4 5 X
5. Organization of Work. . . . . 1 2 (3) 4 5 X
6. Planning Ability. . . . . 1 2 (3) 4 5 X
7. Comments (describe):

Doesn't remember instructions well; needs repeating occasionally; organizes work well; plans her work to a certain extent; attention span is excellent; usually concentrates on work.

H. Discriminations (color, form, & size):

1. Comments (describe problem(s), if any): Discriminates color below average on eye exam; doesn't discriminate form and size overly well; mostly average work in these sections.

I. Manipulative Skills:

1. Dexterity
   a. Gross. . . . . 1 2 3 (4) 5 X
   b. Fine. . . . . 1 2 3 (4) 5 X
2. Coordination
   a. Eye-hand. . . . . 1 2 3 (4) 5 X
   b. Bi-manual. . . . . 1 2 3 (4) 5 X

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c. Eye-hand-foot. . . . . 1 2 (3) 4 5 X

3. Comments (describe):

Average speed and coordination; no noticeable dexterity malfunctions, worked with both hands; good work rhythm; work speed generally received an "average" rating on work samples attempted; but speed was low on the more complicated tasks.

J. Productivity:

1. Speed. . . . . 1 2 (3) 4 5 X
2. Quality. . . . . 1 2 (3) 4 5 X
3. Pace (work rhythm). . . . . 1 2 3 (4) 5 X

K. Generally comment upon the participant's behavior at work and how it affects his productivity (J):

(See comments II - I). Works hard at task; very steady which improves her time; not easily distracted; pays attention to task at hand; very methodical in approach to accomplishing work; work quality usually received about the same rating as speed; might be classified as a slow, steady worker.

IV. SUMMARY:

A. Positive Outstanding Characteristics: Very neat and clean; works hard and is steady; pays attention to task and has good work characteristics in general; wants to finish what she starts; usually prompt and dependable; reacts well to supervisory personnel and coworkers.

B. Negative Outstanding Characteristics: Doesn't interpret directions well - often needs to have them repeated; shows a marked decline in quality when tires; cannot adequately perform more complicated job tasks.

WORK SAMPLE PERFORMANCE

| MEMBER - WORK SAMPLE | WORKER TRAIT GROUP ARRANGEMENT | Passed Time & Quality | REASON FOR FAILING | |
|---|---|---|---|---|
| | | | Time | Quality |
| 1. Nut, Bolt & Washer Assembly | Handling | X | 3 | 5 |
| 2. Rubber Stamping | Handling | | 2 | 4 |
| 3. Sign Making | Handling | X | 3 | 3 |
| 4. Budgette Assembly | Handling | X | 3 | 5 |
| 5. Washer Threading | Handling | X | 5 | 5 |
| 10. Tile Sorting | Sort, Ins. Meas. & Rel. | X | 4 | 5 |
| 11. Nut Packing | Sort, Ins. Meas. & Rel. | X | 4 | 3 |
| 12. Collating Leather Samples | Sort, Ins. Meas. & Rel. | | 2 | 1 |
| 20. Grommet Assembly | Tending | X | 3 | 3 |
| 30. Coupling (Union) Assembly | Manipulating | X | 3 | 3 |
| 31. Belt Assembly | Manipulating | | 3 | 1 |
| 32. Ladder Assembly | Manipulating | Not Given | | |
| 33. Metal Square Fabrication (Soldering) | Manipulating | | 3 | 1 |
| 34. Hardware Assembly | Manipulating | X | 3 | 3 |
| 35. Telephone Assembly | Manipulating | | 1 | 1 |
| 36. Large Lock Assembly | Manipulating | Not Given | | |
| 40. Filing by Numbers | Routine Check & Rec. | Not Given | | |

| | | | | |
|---|---|---|---|---|
| 41. Proofreading | Routine Check & Rec. | Not Given | | |
| 50. Filing by Three Letters | Classify, File & Rel. | | 1 | 1 |
| 51. Nail and Screw Sorting | Classify, File & Rel. | | 3 | 2 |
| 52. Adding Machine | Classify, File & Rec. | | 2 | 1 |
| 53. Payroll Computation | Classify, File & Rec. | Not Given | | |
| 54. Computing Postage | Classify, File & Rec. | | 3 | 1 |
| 55. Typing | Classify, File & Rec. | | | |
| 60. Resistor Reading | Inspect & Stock Check | | | |
| 70. Pipe Assembly | Crafts & Related | | | |
| 80. Blouse Making | Costum. Tail. & Dress | | | |
| 80a. Vest Making | Costum. Tail. & Dress | | | |
| 90. Condensing Principle Drawing | Drafting & Related | | | |

PLEASE NOTE: Check samples as "Passed" only if they receive a rating of three (3) or better in both time and quality.

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RECOMMENDATIONS: (Check appropriate recommendations)

A. Training X

1. Areas Miss White could seemingly benefit from job training as an aide to professional job functions, such as teacher's aide or in a Head Start program.

2. Reason (s) for Training This type of training would be in line with her abilities and interests.

B. Job Placement X

1. Areas Miss White has exhibited vocational abilities sufficient for success in mid-level manipulation and assembly job operations.

2. Reason (s) for Job Placement Client's primary need at present is employment or subsidized (stipend) job training.

C. Other Services (Work Adjustment Training, Medical, Psychiatric, Educational, Vocational, Social, etc.) Vocational Rehabilitation Service

1. Reason (s) for Other Services Client has exhibited limited cultural exposure and may demonstrate a level of cultural retardation low enough to meet eligibility requirements on standardized psychological tests.

VII. SPECIAL COMMENTS FOR EMPLOYERS AND TRAINERS:

Revised Beta Examination score of 86; Wide Range Achievement Test grade level scores of Reading 8.3; Spelling 9.0; Arithmetic 6.7. Client seems to have potential for success in a number of jobs if sufficient time is granted for training purposes. She would prefer to work in a school system so that she can be at home in the summer because her children have no one to care for them while school is not in session. To her, an ideal job would be that of a teacher's aide in the public school system.

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APPENDIX D

AUBURN UNIVERSITY
SPECIAL SERVICES CENTER
VOCATIONAL EVALUATION UNIT

CLIENT: Black, Bertha

DATE: February 2, 1971

DATE OF BIRTH: January 10, 1947

EVALUATION PERIOD: January 18-29, 1971

BACKGROUND INFORMATION:

Miss Bertha Black was referred to the Vocational Evaluation Unit on November 16, 1970 by Mr. Bob Brown, Vocational Rehabilitation, with a reported disability of mental retardation. Miss Black comes from a rather impoverished home, living with her mother, father, and three siblings.

Miss Black is a graduate of Sanford High School (general curriculum) in Auburn, Alabama. She was a low "C" student and took two years of high school typing. Miss Black's entire employment history consists of intermittent babysitting jobs and limited domestic day work.

BEHAVIORAL OBSERVATIONS, GENERAL:

Miss Black is a moderately stout young woman, somewhat sloppy in appearance, often appearing in baggy slacks. Her affect is rather flat and she is quite difficult to establish any rapport with due to her almost total lack of verbalization. She was observed to be a more outgoing individual when in her peer group. Even within the peer group she was never observed to demonstrate any leadership ability.

Throughout the evaluation Miss Black appeared to make a good effort on all tasks including those which she did not enjoy, demonstrating a fair degree of perserverance even on tasks that were considerably above her intellectual ability. She was observed to have considerable difficulty in following other than simple one and two step instructions. While not appearing easily distractable, she did have difficulty in concentrating on a single task for very long periods of time.

Physically, Miss Black possesses adequate strength and functional ability in all four extremities to successfully engage in almost any occupational group.

Despite mild mental retardation she is quite capable of utilizing public transportation.

In general, it appears that Miss Black's major employment handicaps are her present inability to perform complex tasks, her low level of academic achievement, her lack of know how in seeking jobs, and her lack of good basic work habits.

TEST INTERPRETATION:

An initial intellectual screening using the Revised Beta Examination confirmed that Miss Black is functioning in the mild mental deficiency range and was referred to Dr. Gregory Green for administration of a full scale WAIS. Miss Black achieved similar scores on a full scale WAIS with a verbal score of 73, a performance score of 64, with a full scale WAIS I.Q. of 67. This would confirm that Miss Black is a mildly retarded individual. The Wide Range Achievement Test shows Miss Black's reading, spelling and arithmetic achievement as well below average for her educational development. The arithmetic subtest indicates that the client can add and subtract only whole numbers correctly, if even then, somewhat inconsistently. She is unable to work with fractions, decimals, percentages, and is unable to multiply or divide. Miss Black's reading vocabulary is approximately on the 6th grade level and her spelling ability on approximately the 4th grade level. It was felt that her reading comprehension level was probably somewhat below 6th grade level and she was therefore administered the Peabody Individual Achievement Test on which she achieved a 4.5 grade level on reading comprehension. Miss Black, because of her low level of reading comprehension, was not administered any aptitude or special ability tests.

According to the Edwards Personal Preference Schedule, Miss Black has a high need to say witty and clever things, to have others notice and comment favorably upon her, and to be the center of attention. She also has a high need to go out with members of the opposite sex and to engage in sexual activities with members of the opposite sex. On the other hand, she has a very low need to help friends when they are in trouble, to assist others less fortunate, to treat others with kindness and sympathy, and to have others confide in one about personal problems. It might be noted that she showed a consistency level of 12 which, while statistically significant, is a rather low level of significance. Miss Black was also administered the Kuder Vocational Preference Record, but her scores were invalid.

Orthorator scores show that Miss Black's binocular acuity is 20/17 when viewing distant objects and 20/18 for near objects. Monocular acuity with the right eye is 20/20 for distant vision and 20/17 for

near vision. Monocular acuity for the left eye is 20/20 for distant vision and 20/18 for near vision. Phoria testing shows a tendency for the visual axis to deviate upward when viewing near objects. Miss Black demonstrates only limited color perception and only 56.6 percent of normal depth perception. In general, Orthorator scales indicate that Miss Black's eyes are suitable for the performance of most occupations that do not call for high degrees of either depth perception or close color perception.

BEHAVIORAL OBSERVATIONS-VOCATIONAL:

Miss Black's stated vocational objective of clothing store clerk appears to be unfeasible. In discussing this vocational objective with Miss Black, it became evident that she had very little real knowledge of what would be involved in this occupation. In pursuit of this vocational objective, however, Miss Black was allowed to engage in several work sample activities in the clerical-sales area as a means of permitting Miss Black to come to a self-realization of the impracticality of this objective. On the TOWER clerical test number 1 and 4, Miss Black demonstrated inferior ability in quality score and below average time in rate of performance. On the Singer/Graflex Vocational Evaluation System Work Station No. 9 for Office and Sales Clerks Miss Black again demonstrated inferior ability. Miss Black initially indicated that she felt she had done an average job on the samples, but when confronted with the numerous errors she made in these related to sales clerk work in a clothing store, she admitted she would have a good deal of difficulty performing this type of work. Miss Black also engaged in the Bench Assembly tasks and the Needle Trades tasks within the Singer/Graflex System. On the Bench Assembly tasks Miss Black eventually gave up in frustration. However, in utilizing basic tools she demonstrated only a slightly below average aptitude and it is felt that she might very well engage in simple Bench Assembly work of an extremely repetitive nature. On the Needle Trades tasks which uses a foot operated electrical sewing machine, Miss Black was unable to achieve satisfactory eye-hand-foot coordination. Throughout the work sampling phase of the evaluation, Miss Black did show good perseverance on all tasks except the Bench Assembly task which involves the assembly of oily pieces of equipment, and it was felt that it was the soiling of her hands rather than the difficulty of the task that led to her refusal to work any further. While working consistently, Miss Black did demonstrate considerable difficulty in following instructions and concentrating for other than short periods of time on what she was doing.

SUMMARY AND RECOMMENDATIONS:

The results of the psychometric testing and other work sample tasks indicate that Miss Black possesses a low level of intelligence, aptitude, and basic educational skills that would limit her to performing

work of a very routine nature in which she would not be called upon to make independent judgmental decisions. Miss Black does appear to possess adequate manual and finger dexterity to engage in most occupations. Her inability to follow other than the simplest instructions and to concentrate on tasks for long periods of time would indicate a strong need for work conditioning. Miss Black needs further help in the area of personal grooming. She would also strongly benefit from programmed remedial education.

The only practical vocational objective that can be established for Miss Black at present would be as a day domestic. However, with appropriate personal, social and work adjustment training concurrent with remedial education, Miss Black might well successfully engage in a number of bench assembly tasks in local industry.

SIGNED: _____

_____

AUBURN UNIVERSITY
SPECIAL SERVICES CENTER
VOCATIONAL EVALUATION UNIT
TEST RESULTS

NAME: Black, Bertha DATE: 2/3/71

| NAME OF TEST | VARIABLES | RAW SCORE | STANDARD SCORE | PERCENTILE RANK | NORM GROUP |
|---|---|---|---|---|---|
| ABILITY: | | | | | |
| Revised Beta Examination | | 45 | 73 | | |
| INTEREST: | | | | | |
| Kuder Preference Record Vocational Form CM | V - Score Invalid | 31 | | | Adult M (F) |
| | Outdoor | | | | |
| | Mechanical | | | | |
| | Computational | | | | |
| | Scientific | | | | |
| | Persuasive | | | | |
| | Artistic | | | | |
| | Literary | | | | |
| | Musical | | | | |
| | Social Service | | | | |
| | Clerical | | | | |
| PERSONALITY: | | | | | |
| Edwards Personal Preference Schedule | | | | | General Adult M (F) |
| | Achievement | 13 | | 50 | |
| | Deference | 15 | | 56 | |
| | Order | 18 | | 73 | |
| | Exhibition | 18 | | 95 | |
| | Autonomy | 12 | | 54 | |
| | Affiliation | 15 | | 27 | |
| | Intraception | 11 | | 18 | |
| | Succorance | 13 | | 55 | |
| | Dominance | 11 | | 64 | |
| | Abasement | 13 | | 23 | |
| | Nuturance | 8 | | 1 | |
| | Change | 19 | | 76 | |
| | Endurance | 15 | | 39 | |
| | Heterosexuality | 15 | | 84 | |
| | Aggression | 12 | | 71 | |
| | Consistency Score | 9 | | 12 | |
| ACHIEVEMENT: | | | | | |
| Wide Range Achievement Test | Reading Grade Level | 37 | Grd.Lvl. | 6.0 | General Norms |
| | Spelling Grade Level | 13 | | 4.6 | |
| | Arithmetic Grade Level | 11 | | 2.3 | |

AUBURN UNIVERSITY
SPECIAL SERVICES CENTER
VOCATIONAL EVALUATION UNIT
TEST RESULTS

VISION: ORTHORATOR

| | Distant Vision | Near Vision |
|---|---|---|
| Phoria | | |
| Vertical | 5 | 7 |
| Lateral | 9 | 6 |
| Acuity | | |
| Both eyes | 12 | 11 |
| Right Eye | 10 | 12 |
| Left Eye | 10 | 11 |
| Depth Perception | 2 | |
| Color Vision | 1 | |

NORMS: General Population

DEXTERITY: BENNET HAND-TOOL DEXTERITY TEST

NORMS: Male Adults at a Vocational Guidance Center

Time: _____ Min. _____ Sec.

Percentile: _____

CRAWFORD SMALL PARTS DEXTERITY TEST

| | | Time | %-ile |
|---|---|---|---|
| MALE NORMS: Unselected Applicants | | | |
| FEMALE NORMS: Assembly Job Applicants | Pins and Collars | ____ min. ____ sec. | ____ |
| | Screws | ____ min. ____ sec. | ____ |

PURDUE PEGBOARD

| | 1st Trial | | 3 Trials | |
|---|---|---|---|---|
| | No. | %-ile | No. | %-ile |
| Right Hand | ____ | ____ | ____ | ____ |
| Left Hand | ____ | ____ | ____ | ____ |
| Both Hands | ____ | ____ | ____ | ____ |
| R-L-B | ____ | ____ | ____ | ____ |
| Assembly | ____ | ____ | ____ | ____ |

NORMS: Industrial Applicants (Male) (Female)

ADDITIONAL TEST DATA:

| | | |
|---|---|---|
| WAIS | Verbal IQ | 73 |
| | Performance IQ | 64 |
| | Full Scale IQ | 67 |

APPENDIX E

VOCATIONAL EVALUATION FOLLOW-UP FORM

GENERAL INFORMATION

CLIENT NUMBER: _____ EVALUATION SYSTEM USED (X):

NAME: _____ _____ ____JEVS

ADDRESS: _____ ____Model-based

_____ SEX: __M, __F RACE: __B, __W

PHONE: _____ LAST GRADE COMPLETED: _____

DATE OF BIRTH: _____ # OF DAYS IN EVALUATION: _____

EMPLOYMENT HANDICAP OR DISABILITY: _____

TEST SCORES

1. WAIS: V___, P___, F.S.___ 3. Stanford Binet: _____

2. WISC: V___, P___, F.S.___ 4. Revised Beta: _____

5. WRAT: Reading Grade Level____, Arithmetic Grade Level_____

RECOMMENDATIONS

1. Direct Placement (specify):

   1st Choice: _____

   2nd Choice: _____

   3rd Choice: _____

2. Vocational Training (specify): _____

3. On-the-Job Training (specify): _____

4. Sheltered Employment (specify): _____

5. Educational Services (specify): _____

6. Agency Services (specify): _____

7. Other Services (specify): _____

FOLLOW-UP STATUS

3 Month Interval:

1. Job or Training Program (specify): _____

_____

2. Educational Services Received (specify): _____

_____

3. Agency Services Received (specify): _____

_____

4. Other Services Received (specify): _____

_____

5. Unable to Locate: _____

_____

18 Month Interval:

1. Job or Training Program (specify): _____

_____

2. Educational Services Received (specify): _____

_____

3. Agency Services Received (specify): _____

_____

4. Other Services Received (specify): _____

_____

5. Unable to Locate: _____

_____